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P1618P2C3 sequence listing.txt

Sequence Listing

<110> Chen, Jian  
Goddard, Audrey  
Gurney, Austin L.  
Hillan, Kenneth  
Pennica, Diane  
Wood, William I.  
Yuan, Jean

<120> Secreted and Transmembrane Polypeptides and Nucleic  
Acids Encoding the Same

<130> P1618P2C3

<140> US 09/903,806  
<141> 2001-07-11

<150> US 09/665,350  
<151> 2000-09-18

<150> PCT/US00/04414  
<151> 2000-02-22

<150> PCT/US98/18824  
<151> 1998-09-10

<150> US 60/062,287  
<151> 1997-10-17

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<213> Homo Sapien

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P1618P2C3 sequence listing.txt

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<211> 353

<212> PRT

<213> Homo Sapien

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P1618P2C3 sequence listing.txt

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50	55	60		
Glu Glu Lys Thr Leu	Ser Lys Tyr Glu Ser	Ser Glu Ile Arg Leu		
65	70	75		
Leu Glu Ile Leu Glu	Gly Leu Cys Glu Ser	Ser Asp Phe Glu Cys		
80	85	90		
Asn Gln Met Leu Glu	Ala Gln Glu Glu His	Leu Glu Ala Trp Trp		
95	100	105		
Leu Gln Leu Lys Ser	Glu Tyr Pro Asp Leu	Phe Glu Trp Phe Cys		
110	115	120		
Val Lys Thr Leu Lys	Val Cys Cys Ser Pro	Gly Thr Tyr Gly Pro		
125	130	135		
Asp Cys Leu Ala Cys	Gln Gly Gly Ser Gln	Arg Pro Cys Ser Gly		
140	145	150		
Asn Gly His Cys Ser	Gly Asp Gly Ser Arg	Gln Gly Asp Gly Ser		
155	160	165		
Cys Arg Cys His Met	Gly Tyr Gln Gly Pro	Leu Cys Thr Asp Cys		
170	175	180		
Met Asp Gly Tyr Phe	Ser Ser Leu Arg Asn	Glu Thr His Ser Ile		
185	190	195		
Cys Thr Ala Cys Asp	Glu Ser Cys Lys Thr	Cys Ser Gly Leu Thr		
200	205	210		
Asn Arg Asp Cys Gly	Glu Cys Glu Val Gly	Trp Val Leu Asp Glu		
215	220	225		
Gly Ala Cys Val Asp	Val Asp Glu Cys Ala	Ala Glu Pro Pro Pro		
230	235	240		
Cys Ser Ala Ala Gln	Phe Cys Lys Asn Ala	Asn Gly Ser Tyr Thr		
245	250	255		
Cys Glu Glu Cys Asp	Ser Ser Cys Val Gly	Cys Thr Gly Glu Gly		
260	265	270		
Pro Gly Asn Cys Lys	Glu Cys Ile Ser Gly	Tyr Ala Arg Glu His		
275	280	285		
Gly Gln Cys Ala Asp	Val Asp Glu Cys Ser	Leu Ala Glu Lys Thr		
290	295	300		
Cys Val Arg Lys Asn	Glu Asn Cys Tyr Asn	Thr Pro Gly Ser Tyr		
305	310	315		
Val Cys Val Cys Pro	Asp Gly Phe Glu Glu	Thr Glu Asp Ala Cys		
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cgcccagccg tctaaacggg aacagccctg gctgagggag ctgcagcgca 150  
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tgccgccgcg ctctggctct ggagcatcct cctgtgcctg ctggcactgc 300  
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caagctgcag ggcaggcaga atacttctat gaattcctgt ccttgcgctc 550  
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gaagccagcc tcatacatgc cctgaggcca gcaggcgccc agctcaggca 1300

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cattacactt aagaatactg gcctgaattt tattagcttc attataaatc 1500  
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<211> 379  
<212> PRT  
<213> Homo Sapien

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20 25 30  
Pro Gln Glu Glu Ser Leu Tyr Leu Trp Ile Asp Ala His Gln Ala  
35 40 45  
Arg Val Leu Ile Gly Phe Glu Glu Asp Ile Leu Ile Val Ser Glu  
50 55 60  
Gly Lys Met Ala Pro Phe Thr His Asp Phe Arg Lys Ala Gln Gln  
65 70 75  
Arg Met Pro Ala Ile Pro Val Asn Ile His Ser Met Asn Phe Thr  
80 85 90  
Trp Gln Ala Ala Gly Gln Ala Glu Tyr Phe Tyr Glu Phe Leu Ser

P1618P2C3 sequence listing.txt

95	100	105
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Val Gly Phe Pro Cys Leu Gly Lys Gln	Asp Gly Val Ala Ala Phe	
140	145	150
Glu Val Asp Val Ile Val Met Asn Ser	Glu Gly Asn Thr Ile Leu	
155	160	165
Gln Thr Pro Gln Asn Ala Ile Phe Phe	Lys Thr Cys Gln Gln Ala	
170	175	180
Glu Cys Pro Gly Gly Cys Arg Asn Gly	Gly Phe Cys Asn Glu Arg	
185	190	195
Arg Ile Cys Glu Cys Pro Asp Gly Phe	His Gly Pro His Cys Glu	
200	205	210
Lys Ala Leu Cys Thr Pro Arg Cys Met	Asn Gly Gly Leu Cys Val	
215	220	225
Thr Pro Gly Phe Cys Ile Cys Pro Pro	Gly Phe Tyr Gly Val Asn	
230	235	240
Cys Asp Lys Ala Asn Cys Ser Thr Thr	Cys Phe Asn Gly Gly Thr	
245	250	255
Cys Phe Tyr Pro Gly Lys Cys Ile Cys	Pro Pro Gly Leu Glu Gly	
260	265	270
Glu Gln Cys Glu Ile Ser Lys Cys Pro	Gln Pro Cys Arg Asn Gly	
275	280	285
Gly Lys Cys Ile Gly Lys Ser Lys Cys	Lys Cys Ser Lys Gly Tyr	
290	295	300
Gln Gly Asp Leu Cys Ser Lys Pro Val	Cys Glu Pro Gly Cys Gly	
305	310	315
Ala His Gly Thr Cys His Glu Pro Asn	Lys Cys Gln Cys Gln Glu	
320	325	330
Gly Trp His Gly Arg His Cys Asn Lys	Arg Tyr Glu Ala Ser Leu	
335	340	345
Ile His Ala Leu Arg Pro Ala Gly Ala	Gln Leu Arg Gln His Thr	
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 <213> Artificial Sequence

P1618P2C3 sequence listing.txt

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<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 6

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<210> 7

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 7

taagtccggc acattacagg tc 22

<210> 8

<211> 49

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 8

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<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

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<210> 10

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

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<210> 11

P1618P2C3 sequence listing.txt

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 ggagaggaga cgctgccaga tggaaggacg ctcaaatact ggactgcggc 1350  
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 gcggcgtcaa tgagtgcgac atcgagagct tcgtgctggg cgtctggggc 1450



P1618P2C3 sequence listing.txt

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 ggggtccggc ctgggatcca ggctaagggc cggcggaaga ggccccaatg 1550  
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<210> 12  
 <211> 164  
 <212> PRT  
 <213> Homo Sapien

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 Leu Ala Pro Gly Leu His Leu Arg Gly Ile Arg Asp Ala Gly Gly  
 35 40 45  
 Arg Tyr Cys Gln Glu Gln Asp Leu Cys Cys Arg Gly Arg Ala Asp  
 50 55 60  
 Asp Cys Ala Leu Pro Tyr Leu Gly Ala Ile Cys Tyr Cys Asp Leu  
 65 70 75  
 Phe Cys Asn Arg Thr Val Ser Asp Cys Cys Pro Asp Phe Trp Asp  
 80 85 90  
 Phe Cys Leu Gly Val Pro Pro Pro Phe Pro Pro Ile Gln Gly Cys  
 95 100 105  
 Met His Gly Gly Arg Ile Tyr Pro Val Leu Gly Thr Tyr Trp Asp  
 110 115 120  
 Asn Cys Asn Arg Cys Thr Cys Gln Glu Asn Arg Gln Trp His Gly  
 125 130 135

P1618P2C3 sequence listing.txt

Gly	Ser	Arg	His	Asp	Gln	Ser	His	Gln	Pro	Gly	Gln	Leu	Trp	Leu
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				155					160				

<210> 13  
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 <212> DNA  
 <213> Homo Sapien

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 <222> 33, 37, 80, 94, 144, 188  
 <223> unknown base

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 tgccactgac cccaacagct atgttaataa caatgacatc taccagggtca 350  
 ctctgtgcta ccgcctcggc tccaacgaca aggagatcat gaaggagctg 400  
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 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 14  
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<210> 15  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 15  
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<210> 16  
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P1618P2C3 sequence listing.txt

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 16

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<210> 17

<211> 960

<212> DNA

<213> Homo Sapien

<400> 17

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 gccaaaaaaaa 960

<210> 18

<211> 189

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<213> Homo Sapien

<400> 18

Met Thr His Arg Thr Thr Trp Ala Arg Arg Thr Ser Arg Ala  
 1 5 10 15

P1618P2C3 sequence listing.txt

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                35                40                45
Ser Gly Asp Pro Ala Ser Tyr Arg Leu Trp Gly Ala Pro Leu Gln
                50                55                60
Pro Thr Leu Gly Val Val Pro Gln Ala Ser Val Pro Leu Leu Thr
                65                70                75
Asp Leu Ala Gln Trp Glu Pro Val Leu Val Pro Glu Ala His Pro
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                95                100               105
Asp Pro Pro Met Ala Leu Ser Arg Thr Pro Thr Arg Gln Ile Ser
                110               115               120
Ser Ser Asp Thr Asp Pro Pro Ala Asp Gly Pro Ser Asn Pro Leu
                125               130               135
Cys Cys Cys Phe His Gly Pro Ala Phe Ser Thr Leu Asn Pro Val
                140               145               150
Leu Arg His Leu Phe Pro Gln Glu Ala Phe Pro Ala His Pro Ile
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Tyr Asp Leu Ser Gln Val Trp Ser Val Val Ser Pro Ala Pro Ser
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Arg Gly Gln Ala Leu Arg Arg Ala Gln
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 <213> Artificial Sequence

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<220>  
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<400> 20  
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P1618P2C3 sequence listing.txt

<220>

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<400> 21

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<211> 1200

<212> DNA

<213> Homo Sapien

<400> 22

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P1618P2C3 sequence listing.txt

<212> PRT

<213> Homo Sapien

<400> 23

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Ala Met Thr Asp Gln Leu Ser Arg Arg Gln Ile Arg Glu Tyr Gln
      35      40      45
Leu Tyr Ser Arg Thr Ser Gly Lys His Val Gln Val Thr Gly Arg
      50      55      60
Arg Ile Ser Ala Thr Ala Glu Asp Gly Asn Lys Phe Ala Lys Leu
      65      70      75
Ile Val Glu Thr Asp Thr Phe Gly Ser Arg Val Arg Ile Lys Gly
      80      85      90
Ala Glu Ser Glu Lys Tyr Ile Cys Met Asn Lys Arg Gly Lys Leu
      95     100     105
Ile Gly Lys Pro Ser Gly Lys Ser Lys Asp Cys Val Phe Thr Glu
     110     115     120
Ile Val Leu Glu Asn Asn Tyr Thr Ala Phe Gln Asn Ala Arg His
     125     130     135
Glu Gly Trp Phe Met Ala Phe Thr Arg Gln Gly Arg Pro Arg Gln
     140     145     150
Ala Ser Arg Ser Arg Gln Asn Gln Arg Glu Ala His Phe Ile Lys
     155     160     165
Arg Leu Tyr Gln Gly Gln Leu Pro Phe Pro Asn His Ala Glu Lys
     170     175     180
Gln Lys Gln Phe Glu Phe Val Gly Ser Ala Pro Thr Arg Arg Thr
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Lys Arg Thr Arg Arg Pro Gln Pro Leu Thr
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<223> Synthetic Oligonucleotide Probe

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<211> 24

<212> DNA

<213> Artificial Sequence

<220>

P1618P2C3 sequence listing.txt

<223> Synthetic Oligonucleotide Probe

<400> 25

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<212> DNA

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<223> unknown base

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<211> 2479

<212> DNA

<213> Homo Sapien

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 gagacagcag ggagattatt ttaccatacg ccctcaggac gttccctcta 150  
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 tgtttatttt ttttttcttt ttctttttcc caccacattg tattttattt 250  
 ccgtacttca gaaatgggcc tacagaccac aaagtggccc agccatgggg 300  
 cttttttcct gaagtcttgg cttatcattt ccctggggct ctactcacag 350  
 gtgtcctaac tcctggcctg ccctagtgtg tgccgctgcg acaggaactt 400  
 tgtctactgt aatgagcgaa gcttgacctc agtgcctctt gggatccccg 450  
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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

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 <213> Homo Sapien

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 Ser Lys Leu Leu Ala Cys Pro Ser Val Cys Arg Cys Asp Arg Asn  
 35 40 45  
 Phe Val Tyr Cys Asn Glu Arg Ser Leu Thr Ser Val Pro Leu Gly  
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 Ile Pro Glu Gly Val Thr Val Leu Tyr Leu His Asn Asn Gln Ile  
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 His Thr Val Tyr Leu Tyr Gly Asn Gln Leu Asp Glu Phe Pro Met  
 95 100 105  
 Asn Leu Pro Lys Asn Val Arg Val Leu His Leu Gln Glu Asn Asn  
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 Ile Gln Thr Ile Ser Arg Ala Ala Leu Ala Gln Leu Leu Lys Leu  
 125 130 135  
 Glu Glu Leu His Leu Asp Asp Asn Ser Ile Ser Thr Val Gly Val  
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 Glu Asp Gly Ala Phe Arg Glu Ala Ile Ser Leu Lys Leu Leu Phe  
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 Leu Ser Lys Asn His Leu Ser Ser Val Pro Val Gly Leu Pro Val  
 170 175 180  
 Asp Leu Gln Glu Leu Arg Val Asp Glu Asn Arg Ile Ala Val Ile  
 185 190 195  
 Ser Asp Met Ala Phe Gln Asn Leu Thr Ser Leu Glu Arg Leu Ile  
 200 205 210  
 Val Asp Gly Asn Leu Leu Thr Asn Lys Gly Ile Ala Glu Gly Thr  
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 Phe Ser His Leu Thr Lys Leu Lys Glu Phe Ser Ile Val Arg Asn  
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 Ser Leu Ser His Pro Pro Pro Asp Leu Pro Gly Thr His Leu Ile  
 245 250 255  
 Arg Leu Tyr Leu Gln Asp Asn Gln Ile Asn His Ile Pro Leu Thr  
 260 265 270  
 Ala Phe Ser Asn Leu Arg Lys Leu Glu Arg Leu Asp Ile Ser Asn  
 275 280 285

P1618P2C3 sequence listing.txt

Asn Gln Leu Arg	Met	Leu Thr Gln Gly	Val	Phe Asp Asn Leu	Ser
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Cys Ser Ile Lys	Trp	Val Thr Glu Trp	Leu	Lys Tyr Ile Pro	Ser
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Ser Leu Asn Val	Arg	Gly Phe Met Cys	Gln	Gly Pro Glu Gln	Val
	335		340		345
Arg Gly Met Ala	Val	Arg Glu Leu Asn	Met	Asn Leu Leu Ser	Cys
	350		355		360
Pro Thr Thr Thr	Pro	Gly Leu Pro Leu	Phe	Thr Pro Ala Pro	Ser
	365		370		375
Thr Ala Ser Pro	Thr	Thr Gln Pro Pro	Thr	Leu Ser Ile Pro	Asn
	380		385		390
Pro Ser Arg Ser	Tyr	Thr Pro Pro Thr	Pro	Thr Thr Ser Lys	Leu
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Pro Thr Ile Pro	Asp	Trp Asp Gly Arg	Glu	Arg Val Thr Pro	Pro
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Ile Ser Glu Arg	Ile	Gln Leu Ser Ile	His	Phe Val Asn Asp	Thr
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Ser Ile Gln Val	Ser	Trp Leu Ser Leu	Phe	Thr Val Met Ala	Tyr
	440		445		450
Lys Leu Thr Trp	Val	Lys Met Gly His	Ser	Leu Val Gly Gly	Ile
	455		460		465
Val Gln Glu Arg	Ile	Val Ser Gly Glu	Lys	Gln His Leu Ser	Leu
	470		475		480
Val Asn Leu Glu	Pro	Arg Ser Thr Tyr	Arg	Ile Cys Leu Val	Pro
	485		490		495
Leu Asp Ala Phe	Asn	Tyr Arg Ala Val	Glu	Asp Thr Ile Cys	Ser
	500		505		510
Glu Ala Thr Thr	His	Ala Ser Tyr Leu	Asn	Asn Gly Ser Asn	Thr
	515		520		525
Ala Ser Ser His	Glu	Gln Thr Thr Ser	His	Ser Met Gly Ser	Pro
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Phe Leu Leu Ala	Gly	Leu Ile Gly Gly	Ala	Val Ile Phe Val	Leu
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Val Val Leu Leu	Ser	Val Phe Cys Trp	His	Met His Lys Lys	Gly
	560		565		570
Arg Tyr Thr Ser	Gln	Lys Trp Lys Tyr	Asn	Arg Gly Arg Arg	Lys
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Asp Asp Tyr Cys	Glu	Ala Gly Thr Lys	Lys	Asp Asn Ser Ile	Leu
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P1618P2C3 sequence listing.txt

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Gln	Leu	Leu	Lys	Gly	Asp	Phe	Arg	Leu	Gln	Pro	Ile	Tyr	Thr	Pro
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Asn	Gly	Gly	Ile	Asn	Tyr	Thr	Asp	Cys	His	Ile	Pro	Asn	Asn	Met
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Arg	Tyr	Cys	Asn	Ser	Ser	Val	Pro	Asp	Leu	Glu	His	Cys	His	Thr
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<212> DNA

<213> Artificial Sequence

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<223> Synthetic Oligonucleotide Probe

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<210> 30

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 30

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<210> 31

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 31

acgcagattt gagaaggctg tc 22

<210> 32

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<212> DNA

<213> Artificial Sequence

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<223> Synthetic Oligonucleotide Probe

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<212> DNA

<213> Homo Sapien

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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

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gacaagaagt atacactaac ttgtataaat ttatctagga aaaaaatcct 3150

P1618P2C3 sequence listing.txt

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 Ser Ile Ser Arg Gly Arg His Ala Arg Thr His Pro Gln Thr Ala  
 35 40 45  
 Leu Leu Glu Ser Ser Cys Glu Asn Lys Arg Ala Asp Leu Val Phe  
 50 55 60  
 Ile Ile Asp Ser Ser Arg Ser Val Asn Thr His Asp Tyr Ala Lys  
 65 70 75  
 Val Lys Glu Phe Ile Val Asp Ile Leu Gln Phe Leu Asp Ile Gly  
 80 85 90  
 Pro Asp Val Thr Arg Val Gly Leu Leu Gln Tyr Gly Ser Thr Val  
 95 100 105  
 Lys Asn Glu Phe Ser Leu Lys Thr Phe Lys Arg Lys Ser Glu Val  
 110 115 120  
 Glu Arg Ala Val Lys Arg Met Arg His Leu Ser Thr Gly Thr Met  
 125 130 135  
 Thr Gly Leu Ala Ile Gln Tyr Ala Leu Asn Ile Ala Phe Ser Glu  
 140 145 150  
 Ala Glu Gly Ala Arg Pro Leu Arg Glu Asn Val Pro Arg Val Ile  
 155 160 165  
 Met Ile Val Thr Asp Gly Arg Pro Gln Asp Ser Val Ala Glu Val  
 170 175 180  
 Ala Ala Lys Ala Arg Asp Thr Gly Ile Leu Ile Phe Ala Ile Gly  
 185 190 195  
 Val Gly Gln Val Asp Phe Asn Thr Leu Lys Ser Ile Gly Ser Glu  
 200 205 210  
 Pro His Glu Asp His Val Phe Leu Val Ala Asn Phe Ser Gln Ile  
 215 220 225

P1618P2C3 sequence listing.txt

Glu Thr Leu Thr	Ser 230	Val Phe Gln Lys	Lys 235	Leu Cys Thr Ala	His 240
Met Cys Ser Thr	Leu 245	Glu His Asn Cys	Ala 250	His Phe Cys Ile	Asn 255
Ile Pro Gly Ser	Tyr 260	Val Cys Arg Cys	Lys 265	Gln Gly Tyr Ile	Leu 270
Asn Ser Asp Gln	Thr 275	Thr Cys Arg Ile	Gln 280	Asp Leu Cys Ala	Met 285
Glu Asp His Asn	Cys 290	Glu Gln Leu Cys	Val 295	Asn Val Pro Gly	Ser 300
Phe Val Cys Gln	Cys 305	Tyr Ser Gly Tyr	Ala 310	Leu Ala Glu Asp	Gly 315
Lys Arg Cys Val	Ala 320	Val Asp Tyr Cys	Ala 325	Ser Glu Asn His	Gly 330
Cys Glu His Glu	Cys 335	Val Asn Ala Asp	Gly 340	Ser Tyr Leu Cys	Gln 345
Cys His Glu Gly	Phe 350	Ala Leu Asn Pro	Asp 355	Glu Lys Thr Cys	Thr 360
Arg Ile Asn Tyr	Cys 365	Ala Leu Asn Lys	Pro 370	Gly Cys Glu His	Glu 375
Cys Val Asn Met	Glu 380	Glu Ser Tyr Tyr	Cys 385	Arg Cys His Arg	Gly 390
Tyr Thr Leu Asp	Pro 395	Asn Gly Lys Thr	Cys 400	Ser Arg Val Asp	His 405
Cys Ala Gln Gln	Asp 410	His Gly Cys Glu	Gln 415	Leu Cys Leu Asn	Thr 420
Glu Asp Ser Phe	Val 425	Cys Gln Cys Ser	Glu 430	Gly Phe Leu Ile	Asn 435
Glu Asp Leu Lys	Thr 440	Cys Ser Arg Val	Asp 445	Tyr Cys Leu Leu	Ser 450
Asp His Gly Cys	Glu 455	Tyr Ser Cys Val	Asn 460	Met Asp Arg Ser	Phe 465
Ala Cys Gln Cys	Pro 470	Glu Gly His Val	Leu 475	Arg Ser Asp Gly	Lys 480
Thr Cys Ala Lys	Leu 485	Asp Ser Cys Ala	Leu 490	Gly Asp His Gly	Cys 495
Glu His Ser Cys	Val 500	Ser Ser Glu Asp	Ser 505	Phe Val Cys Gln	Cys 510
Phe Glu Gly Tyr	Ile 515	Leu Arg Glu Asp	Gly 520	Lys Thr Cys Arg	Arg 525
Lys Asp Val Cys	Gln 530	Ala Ile Asp His	Gly 535	Cys Glu His Ile	Cys 540

P1618P2C3 sequence listing.txt

Val Asn Ser Asp	Asp Ser Tyr Thr Cys	Glu Cys Leu Glu Gly	Phe
545	550	555	
Arg Leu Ala Glu	Asp Gly Lys Arg Cys	Arg Arg Lys Asp Val	Cys
560	565	570	
Lys Ser Thr His	His Gly Cys Glu His	Ile Cys Val Asn Asn	Gly
575	580	585	
Asn Ser Tyr Ile	Cys Lys Cys Ser Glu	Gly Phe Val Leu Ala	Glu
590	595	600	
Asp Gly Arg Arg	Cys Lys Lys Cys Thr	Glu Gly Pro Ile Asp	Leu
605	610	615	
Val Phe Val Ile	Asp Gly Ser Lys Ser	Leu Gly Glu Glu Asn	Phe
620	625	630	
Glu Val Val Lys	Gln Phe Val Thr Gly	Ile Ile Asp Ser Leu	Thr
635	640	645	
Ile Ser Pro Lys	Ala Ala Arg Val Gly	Leu Leu Gln Tyr Ser	Thr
650	655	660	
Gln Val His Thr	Glu Phe Thr Leu Arg	Asn Phe Asn Ser Ala	Lys
665	670	675	
Asp Met Lys Lys	Ala Val Ala His Met	Lys Tyr Met Gly Lys	Gly
680	685	690	
Ser Met Thr Gly	Leu Ala Leu Lys His	Met Phe Glu Arg Ser	Phe
695	700	705	
Thr Gln Gly Glu	Gly Ala Arg Pro Leu	Ser Thr Arg Val Pro	Arg
710	715	720	
Ala Ala Ile Val	Phe Thr Asp Gly Arg	Ala Gln Asp Asp Val	Ser
725	730	735	
Glu Trp Ala Ser	Lys Ala Lys Ala Asn	Gly Ile Thr Met Tyr	Ala
740	745	750	
Val Gly Val Gly	Lys Ala Ile Glu Glu	Glu Leu Gln Glu Ile	Ala
755	760	765	
Ser Glu Pro Thr	Asn Lys His Leu Phe	Tyr Ala Glu Asp Phe	Ser
770	775	780	
Thr Met Asp Glu	Ile Ser Glu Lys Leu	Lys Lys Gly Ile Cys	Glu
785	790	795	
Ala Leu Glu Asp	Ser Asp Gly Arg Gln	Asp Ser Pro Ala Gly	Glu
800	805	810	
Leu Pro Lys Thr	Val Gln Gln Pro Thr	Glu Ser Glu Pro Val	Thr
815	820	825	
Ile Asn Ile Gln	Asp Leu Leu Ser Cys	Ser Asn Phe Ala Val	Gln
830	835	840	
His Arg Tyr Leu	Phe Glu Glu Asp Asn	Leu Leu Arg Ser Thr	Gln
845	850	855	



P1618P2C3 sequence listing.txt

Lys	Leu	Ser	His	Ser	Thr	Lys	Pro	Ser	Gly	Ser	Pro	Leu	Glu	Glu
				860					865					870
Lys	His	Asp	Gln	Cys	Lys	Cys	Glu	Asn	Leu	Ile	Met	Phe	Gln	Asn
				875					880					885
Leu	Ala	Asn	Glu	Glu	Val	Arg	Lys	Leu	Thr	Gln	Arg	Leu	Glu	Glu
				890					895					900
Met	Thr	Gln	Arg	Met	Glu	Ala	Leu	Glu	Asn	Arg	Leu	Arg	Tyr	Arg
				905					910					915

<210> 35

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 35

gtgaccctgg ttgtgaatac tcc 23

<210> 36

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 36

acagccatgg tctatagctt gg 22

<210> 37

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 37

gcctgtcagt gtcctgaggg acacgtgctc cgcagcgatg ggaag 45

<210> 38

<211> 1813

<212> DNA

<213> Homo Sapien

<400> 38

ggagccgccc tgggtgtcag cggctcggct cccgcgcacg ctccggccgt 50

cgcgcagcct cggcacctgc aggtccgtgc gtcccgcggc tggcgcccct 100

gactccgtcc cggccagggg gggccatgat ttccctcccg gggcccctgg 150

tgaccaactt gctgcggttt ttgttcctgg ggctgagtgc cctcgcgccc 200

ccctcgcggg ccagctgca actgcacttg cccgccaacc ggttgaggc 250

ggtggaggga ggggaagtgg tgcttcacg gtggtacacc ttgcacgggg 300

P1618P2C3 sequence listing.txt

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aggtgtcttc atcccagcca tgggaggtgc cctttgtgat gtggttcttc 350
aaacagaaag aaaaggagga tcaggtgttg tcctacatca atggggtcac 400
aacaagcaaa cctggagtat ccttgggtcta ctccatgccc tcccggaacc 450
tgtccctgcg gctggaggggt ctccaggaga aagactctgg cccctacagc 500
tgctccgtga atgtgcaaga caaacaaggc aaatctaggg gccacagcat 550
caaaacctta gaactcaatg tactgggttcc tccagctcct ccacctgcc 600
gtctccaggg tgtgccccat gtgggggcaa acgtgaccct gagctgccag 650
tctccaagga gtaagccgcg tgtccaatac cagtgggatc ggcagcttcc 700
atccttccag actttctttg caccagcatt agatgtcatc cgtgggtctt 750
taagcctcac caacctttcg tcttccatgg ctggagtcta tgtctgcaag 800
gcccacaatg aggtgggcac tgcccaatgt aatgtgacgc tggaagtgag 850
cacagggcct ggagctgcag tggttgctgg agctgttggt ggtaccctgg 900
ttggactggg gttgctggct gggctggtcc tcttgtagca ccgccggggc 950
aaggccctgg aggagccagc caatgatatc aaggaggatg ccattgctcc 1000
ccggaccctg ccctggccca agagctcaga cacaatctcc aagaatggga 1050
ccctttcttc tgtcacctcc gcacgagccc tccggccacc ccatggccct 1100
cccaggcctg gtgcattgac cccacgccc agtctctcca gccaggccct 1150
gccctacca agactgcca cgacagatgg gggccaccct caaccaatat 1200
cccccatccc tgggtggggt tcttctcttg gcttgagccg catgggtgct 1250
gtgcctgtga tgggtgcctgc ccagagtcaa gctggctctc tggatatgat 1300
accccaccac tcattggcta aaggatttgg ggtctctcct tcctataagg 1350
gtcacctcta gcacagaggc ctgagtcatg ggaaagagtc acactcctga 1400
cccttagtac tctgccccca cctctcttta ctgtgggaaa accatctcag 1450
taagacctaa gtgtccagga gacagaagga gaagaggaag tggatctgga 1500
attgggagga gcctccaccc acccctgact cctccttatg aagccagctg 1550
ctgaaattag ctactacca agagtgaggg gcagagactt ccagtcactg 1600
agtctcccag gcccccttga tctgtacccc acccctatct aacaccacc 1650
ttggctcca ctccagctcc ctgtattgat ataacctgtc aggctggctt 1700
ggttaggttt tactggggca gaggataggg aatctcttat taaaactaac 1750
atgaaatatg tgttgttttc atttgcaaat ttaaataaag atacataatg 1800
tttgtatgaa aaa 1813

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P1618P2C3 sequence listing.txt

<211> 390  
 <212> PRT  
 <213> Homo Sapien

<400> 39

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Met Ile Ser Leu Pro Gly Pro Leu Val Thr Asn Leu Leu Arg Phe
 1          5          10          15

Leu Phe Leu Gly Leu Ser Ala Leu Ala Pro Pro Ser Arg Ala Gln
          20          25          30

Leu Gln Leu His Leu Pro Ala Asn Arg Leu Gln Ala Val Glu Gly
          35          40          45

Gly Glu Val Val Leu Pro Ala Trp Tyr Thr Leu His Gly Glu Val
          50          55          60

Ser Ser Ser Gln Pro Trp Glu Val Pro Phe Val Met Trp Phe Phe
          65          70          75

Lys Gln Lys Glu Lys Glu Asp Gln Val Leu Ser Tyr Ile Asn Gly
          80          85          90

Val Thr Thr Ser Lys Pro Gly Val Ser Leu Val Tyr Ser Met Pro
          95          100          105

Ser Arg Asn Leu Ser Leu Arg Leu Glu Gly Leu Gln Glu Lys Asp
          110          115          120

Ser Gly Pro Tyr Ser Cys Ser Val Asn Val Gln Asp Lys Gln Gly
          125          130          135

Lys Ser Arg Gly His Ser Ile Lys Thr Leu Glu Leu Asn Val Leu
          140          145          150

Val Pro Pro Ala Pro Pro Ser Cys Arg Leu Gln Gly Val Pro His
          155          160          165

Val Gly Ala Asn Val Thr Leu Ser Cys Gln Ser Pro Arg Ser Lys
          170          175          180

Pro Ala Val Gln Tyr Gln Trp Asp Arg Gln Leu Pro Ser Phe Gln
          185          190          195

Thr Phe Phe Ala Pro Ala Leu Asp Val Ile Arg Gly Ser Leu Ser
          200          205          210

Leu Thr Asn Leu Ser Ser Ser Met Ala Gly Val Tyr Val Cys Lys
          215          220          225

Ala His Asn Glu Val Gly Thr Ala Gln Cys Asn Val Thr Leu Glu
          230          235          240

Val Ser Thr Gly Pro Gly Ala Ala Val Val Ala Gly Ala Val Val
          245          250          255

Gly Thr Leu Val Gly Leu Gly Leu Leu Ala Gly Leu Val Leu Leu
          260          265          270

Tyr His Arg Arg Gly Lys Ala Leu Glu Glu Pro Ala Asn Asp Ile
          275          280          285

Lys Glu Asp Ala Ile Ala Pro Arg Thr Leu Pro Trp Pro Lys Ser
    
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P1618P2C3 sequence listing.txt  
 290 295 300

Ser Asp Thr Ile	Ser Lys Asn Gly Thr	Leu Ser Ser Val Thr	Ser
305	310	315	
Ala Arg Ala Leu	Arg Pro Pro His Gly	Pro Pro Arg Pro Gly	Ala
320	325	330	
Leu Thr Pro Thr	Pro Ser Leu Ser Ser	Gln Ala Leu Pro Ser	Pro
335	340	345	
Arg Leu Pro Thr	Thr Asp Gly Ala His	Pro Gln Pro Ile Ser	Pro
350	355	360	
Ile Pro Gly Gly	Val Ser Ser Ser Gly	Leu Ser Arg Met Gly	Ala
365	370	375	
Val Pro Val Met	Val Pro Ala Gln Ser	Gln Ala Gly Ser Leu	Val
380	385	390	

<210> 40  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 40  
 aggtctcca ggagaaagac tc 22

<210> 41  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 41  
 attgtgggcc ttgcagacat agac 24

<210> 42  
 <211> 50  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 42  
 ggccacagca tcaaaacctt agaactcaat gtactgggtc ctccagctcc 50

<210> 43  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 43  
 gtgtgacaca gcgtgggc 18

P1618P2C3 sequence listing.txt

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<210> 44
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 44
gaccggcagg cttctgcg 18

<210> 45
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 45
cagcagcttc agccaccagg agtgg 25

<210> 46
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 46
ctgagccgtg ggctgcagtc tcgc 24

<210> 47
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 47
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<210> 48
<211> 2822
<212> DNA
<213> Homo Sapien

<400> 48
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ttttccactt tgttgaattg ttcctatact caaaattgca ccaagacacc 100
ttgtctccca aatgcaaaat gtgaaatacg caatggaatt gaagcctgct 150
attgcaacat gggattttca ggaaatggtg tcacaatttg tgaagatgat 200
aatgaatgtg gaaatttaac tcagtcctgt ggcgaaaatg ctaattgcac 250
taacacagaa ggaagttatt attgtatgtg tgtacctggc ttcagatcca 300

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P1618P2C3 sequence listing.txt

gcagtaacca agacaggttt atcactaatg atggaaccgt ctgtatagaa 350  
aatgtgaatg caaactgcc a tttagataat gtctgtatag ctgcaaata 400  
taataaaact ttaacaaaaa tcagatccat aaaagaacct gtggctttgc 450  
tacaagaagt ctatagaaat tctgtgacag atctttcacc aacagatata 500  
attacatata tagaaatatt agctgaatca tcttcattac taggttacia 550  
gaacaacact atctcagcca aggacaccct ttctaactca actcttactg 600  
aatttgtaaa aaccgtgaat aattttgttc aaagggatac atttgtagtt 650  
tgggacaagt tatctgtgaa tcataggaga acacatctta caaaactcat 700  
gcacactgtt gaacaagcta ctttaaggat atcccagagc ttccaaaaga 750  
ccacagagtt tgatacaaat tcaacggata tagctctcaa agttttcttt 800  
tttgattcat ataacatgaa acatattcat cctcatatga atatggatgg 850  
agactacata aatatatttc caaagagaaa agctgcatat gattcaaatg 900  
gcaatgttgc agttgcattt ttatattata agagtattgg tcctttgctt 950  
tcatcatctg acaacttctt attgaaacct caaaattatg ataattctga 1000  
agaggaggaa agagtcatat cttcagtaat ttcagtctca atgagctcaa 1050  
accacccac attatatgaa cttgaaaaaa taacatttac attaagtcac 1100  
cgaaaggcca cagataggta taggagtcta tgtgcatttt ggaattactc 1150  
acctgatacc atgaatggca gctggtcttc agagggtgtg gagctgacac 1200  
actcaaatga gaccacaccc tcatgccgct gtaatcacct gacacatttt 1250  
gcaattttga tgcctctggt tccttccatt ggtattaaag attataatat 1300  
tcttacaagg atcactcaac taggaataat tatttcactg atttgtcttg 1350  
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acaacaattc acaaaaatct ttgctgtagc ctatttcttg ctgaacttgt 1450  
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accagcatgc ctaatcattc ttgttaactc cttggctttt ggagtcatca 1800  
tatacaaagt ttttcgtcac actgcagggt tgaaaccaga agttagtgtc 1850  
tttgagaaca taaggctctg tgcaagagga gccctcgctc ttctgttcct 1900

P1618P2C3 sequence listing.txt

tctcggcacc acctggatct ttggggttct ccatgttggtg cacgcatcag 1950  
 tggttacagc ttacctcttc acagtcagca atgctttcca ggggatgttc 2000  
 atttttttat tcctgtgtgt tttatctaga aagattcaag aagaatatta 2050  
 cagattgttc aaaaatgtcc cctgttgttt tggatgttta aggtaaacad 2100  
 agagaatggt ggataattac aactgcacaa aaataaaaaat tccaagctgt 2150  
 ggaatgacaa tgtataaaaa tgactcatca aattatccaa ttattaacta 2200  
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 agacttctgt ttgctaaatc tgtttctttt tctaataattc taaaaaaaaa 2750  
 aaaaagggtt acctccacaa attgaaaaaa aaaaaaaaaa aaaaaaaaaa 2800  
 aaaaaaaaaa aaaaaaaaaa aa 2822

<210> 49  
 <211> 690  
 <212> PRT  
 <213> Homo Sapien

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 20 25 30  
 Ala Lys Cys Glu Ile Arg Asn Gly Ile Glu Ala Cys Tyr Cys Asn  
 35 40 45  
 Met Gly Phe Ser Gly Asn Gly Val Thr Ile Cys Glu Asp Asp Asn  
 50 55 60  
 Glu Cys Gly Asn Leu Thr Gln Ser Cys Gly Glu Asn Ala Asn Cys  
 65 70 75  
 Thr Asn Thr Glu Gly Ser Tyr Tyr Cys Met Cys Val Pro Gly Phe  
 80 85 90

P1618P2C3 sequence listing.txt

Arg Ser Ser Ser Asn Gln Asp Arg Phe	Ile Thr Asn Asp Gly Thr	95	100	105
Val Cys Ile Glu Asn Val Asn Ala Asn	Cys His Leu Asp Asn Val	110	115	120
Cys Ile Ala Ala Asn Ile Asn Lys Thr	Leu Thr Lys Ile Arg Ser	125	130	135
Ile Lys Glu Pro Val Ala Leu Leu Gln	Glu Val Tyr Arg Asn Ser	140	145	150
Val Thr Asp Leu Ser Pro Thr Asp Ile	Ile Thr Tyr Ile Glu Ile	155	160	165
Leu Ala Glu Ser Ser Ser Leu Leu Gly	Tyr Lys Asn Asn Thr Ile	170	175	180
Ser Ala Lys Asp Thr Leu Ser Asn Ser	Thr Leu Thr Glu Phe Val	185	190	195
Lys Thr Val Asn Asn Phe Val Gln Arg	Asp Thr Phe Val Val Trp	200	205	210
Asp Lys Leu Ser Val Asn His Arg Arg	Thr His Leu Thr Lys Leu	215	220	225
Met His Thr Val Glu Gln Ala Thr Leu	Arg Ile Ser Gln Ser Phe	230	235	240
Gln Lys Thr Thr Glu Phe Asp Thr Asn	Ser Thr Asp Ile Ala Leu	245	250	255
Lys Val Phe Phe Phe Asp Ser Tyr Asn	Met Lys His Ile His Pro	260	265	270
His Met Asn Met Asp Gly Asp Tyr Ile	Asn Ile Phe Pro Lys Arg	275	280	285
Lys Ala Ala Tyr Asp Ser Asn Gly Asn	Val Ala Val Ala Phe Leu	290	295	300
Tyr Tyr Lys Ser Ile Gly Pro Leu Leu	Ser Ser Ser Asp Asn Phe	305	310	315
Leu Leu Lys Pro Gln Asn Tyr Asp Asn	Ser Glu Glu Glu Glu Arg	320	325	330
Val Ile Ser Ser Val Ile Ser Val Ser	Met Ser Ser Asn Pro Pro	335	340	345
Thr Leu Tyr Glu Leu Glu Lys Ile Thr	Phe Thr Leu Ser His Arg	350	355	360
Lys Val Thr Asp Arg Tyr Arg Ser Leu	Cys Ala Phe Trp Asn Tyr	365	370	375
Ser Pro Asp Thr Met Asn Gly Ser Trp	Ser Ser Glu Gly Cys Glu	380	385	390
Leu Thr Tyr Ser Asn Glu Thr His Thr	Ser Cys Arg Cys Asn His	395	400	405



P1618P2C3 sequence listing.txt

Leu Thr His Phe	Ala Ile	Leu Met Ser	Ser Gly Pro Ser Ile	Gly
410			415	420
Ile Lys Asp Tyr	Asn Ile	Leu Thr Arg	Ile Thr Gln Leu Gly	Ile
425			430	435
Ile Ile Ser Leu	Ile Cys	Leu Ala Ile	Cys Ile Phe Thr Phe	Trp
440			445	450
Phe Phe Ser Glu	Ile Gln	Ser Thr Arg	Thr Thr Ile His Lys	Asn
455			460	465
Leu Cys Cys Ser	Leu Phe	Leu Ala Glu	Leu Val Phe Leu Val	Gly
470			475	480
Ile Asn Thr Asn	Thr Asn	Lys Leu Phe	Cys Ser Ile Ile Ala	Gly
485			490	495
Leu Leu His Tyr	Phe Phe	Leu Ala Ala	Phe Ala Trp Met Cys	Ile
500			505	510
Glu Gly Ile His	Leu Tyr	Leu Ile Val	Val Gly Val Ile Tyr	Asn
515			520	525
Lys Gly Phe Leu	His Lys	Asn Phe Tyr	Ile Phe Gly Tyr Leu	Ser
530			535	540
Pro Ala Val Val	Val Gly	Phe Ser Ala	Ala Leu Gly Tyr Arg	Tyr
545			550	555
Tyr Gly Thr Thr	Lys Val	Cys Trp Leu	Ser Thr Glu Asn Asn	Phe
560			565	570
Ile Trp Ser Phe	Ile Gly	Pro Ala Cys	Leu Ile Ile Leu Val	Asn
575			580	585
Leu Leu Ala Phe	Gly Val	Ile Ile Tyr	Lys Val Phe Arg His	Thr
590			595	600
Ala Gly Leu Lys	Pro Glu	Val Ser Cys	Phe Glu Asn Ile Arg	Ser
605			610	615
Cys Ala Arg Gly	Ala Leu	Ala Leu Leu	Phe Leu Leu Gly Thr	Thr
620			625	630
Trp Ile Phe Gly	Val Leu	His Val Val	His Ala Ser Val Val	Thr
635			640	645
Ala Tyr Leu Phe	Thr Val	Ser Asn Ala	Phe Gln Gly Met Phe	Ile
650			655	660
Phe Leu Phe Leu	Cys Val	Leu Ser Arg	Lys Ile Gln Glu Glu	Tyr
665			670	675
Tyr Arg Leu Phe	Lys Asn	Val Pro Cys	Cys Phe Gly Cys Leu	Arg
680			685	690

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 <212> DNA  
 <213> Homo Sapien

<220>

P1618P2C3 sequence listing.txt

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<222> 61  
<223> unknown base

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atttccaaag ngaaaagccg gcatatggat tcaaatggca atgttgcagt 100  
tgcattttta tattataaga gtattggtcc ctttgctttc atcatctgac 150  
aacttcttat tgaaacctca aaattatgat aattctgaag aggaggaaag 200  
agtcatatct tcagtaattt cagtctcaat gagctcaaac ccaccacat 250  
tatatgaact tgaaaaaata acatttacat taagtcatcg aaaggtcaca 300  
gataggata ggagtctatg tggcattttg gaatactcac ctgataccat 350  
gaatggcagc tgggtcttcag agggctgtga gctgacatac tcaaatgaga 400  
cccacacctc atgccgctgt aatcacctga cacattttgc aattttgatg 450  
tcctctggtc cttccattgg tattaaagat tataatattc ttacaaggat 500  
cactcaacta ggaataatta ttctactgat ttgtcttgcc atatgcattt 550  
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<211> 20  
<212> DNA  
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<220>  
<223> Synthetic Oligonucleotide Probe

<400> 51  
ggtaatgagc tccattacag 20

<210> 52  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 52  
ggagtagaaa gcgcatgg 18

<210> 53  
<211> 22  
<212> DNA  
<213> Artificial Sequence

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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

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p1618P2C3 sequence listing.txt

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 35 40 45  
 His Leu Tyr Thr Ser Gly Pro His Gly Leu Ser Ser Cys Phe Leu  
 50 55 60  
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 65 70 75  
 Ala His Ser Leu Leu Glu Ile Lys Ala Val Ala Leu Arg Thr Val  
 80 85 90  
 Ala Ile Lys Gly Val His Ser Val Arg Tyr Leu Cys Met Gly Ala  
 95 100 105  
 Asp Gly Lys Met Gln Gly Leu Leu Gln Tyr Ser Glu Glu Asp Cys  
 110 115 120  
 Ala Phe Glu Glu Glu Ile Arg Pro Asp Gly Tyr Asn Val Tyr Arg  
 125 130 135  
 Ser Glu Lys His Arg Leu Pro Val Ser Leu Ser Ser Ala Lys Gln  
 140 145 150  
 Arg Gln Leu Tyr Lys Asn Arg Gly Phe Leu Pro Leu Ser His Phe  
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 170 175 180  
 Gly His Leu Glu Ser Asp Met Phe Ser Ser Pro Leu Glu Thr Asp  
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P1618P2C3 sequence listing.txt

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<211> 42

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<210> 62

<211> 22

<212> DNA

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<210> 63

<211> 1295

<212> DNA

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 gggaaatatc gttgtgaagt tagtgcccca tctgagcaag gccaaaacct 450  
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P1618P2C3 sequence listing.txt

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<212> PRT

<213> Homo Sapien

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Leu	Glu	Trp	Lys	Lys	Leu	Gly	Arg	Ser	Val	Ser	Phe	Val	Tyr	Tyr
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Asp	Phe	Asn	Ile	Arg	Ile	Lys	Asn	Val	Thr	Arg	Ser	Asp	Ala	Gly
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Lys	Tyr	Arg	Cys	Glu	Val	Ser	Ala	Pro	Ser	Glu	Gln	Gly	Gln	Asn
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				125					130					135
Val	Pro	Ser	Cys	Glu	Val	Pro	Ser	Ser	Ala	Leu	Ser	Gly	Thr	Val
				140					145					150
Val	Glu	Leu	Arg	Cys	Gln	Asp	Lys	Glu	Gly	Asn	Pro	Ala	Pro	Glu
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P1618P2C3 sequence listing.txt

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Pro	Gly	Lys	Arg	Met	Gln	Val	Asp	Asp	Leu	Asn	Ile	Ser	Gly	Ile
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Leu	Gly	Val	Cys	Tyr	Ala	Gln	Arg	Lys	Gly	Tyr	Phe	Ser	Lys	Glu
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Ser	Glu	Asn	Val	Gln	Trp	Leu	Thr	Pro	Val	Ile	Pro	Ala	Leu	Trp
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<212> DNA

<213> Artificial Sequence

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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

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Pro Val Asn Leu	Thr 95	Gly Leu Asp Leu Ser 100	Gln Asn Asn Leu Ser 105
Ser Val Thr Asn	Ile 110	Asn Val Lys Lys Met 115	Pro Gln Leu Leu Ser 120
Val Tyr Leu Glu	Glu 125	Asn Lys Leu Thr Glu 130	Leu Pro Glu Lys Cys 135
Leu Ser Glu Leu	Ser 140	Asn Leu Gln Glu Leu 145	Tyr Ile Asn His Asn 150
Leu Leu Ser Thr	Ile 155	Ser Pro Gly Ala Phe 160	Ile Gly Leu His Asn 165
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Ser Lys Trp Phe	Asp 185	Ala Leu Pro Asn Leu 190	Glu Ile Leu Met Ile 195
Gly Glu Asn Pro	Ile 200	Ile Arg Ile Lys Asp 205	Met Asn Phe Lys Pro 210
Leu Ile Asn Leu	Arg 215	Ser Leu Val Ile Ala 220	Gly Ile Asn Leu Thr 225
Glu Ile Pro Asp	Asn 230	Ala Leu Val Gly Leu 235	Glu Asn Leu Glu Ser 240
Ile Ser Phe Tyr	Asp 245	Asn Arg Leu Ile Lys 250	Val Pro His Val Ala 255
Leu Gln Lys Val	Val 260	Asn Leu Lys Phe Leu 265	Asp Leu Asn Lys Asn 270
Pro Ile Asn Arg	Ile 275	Arg Arg Gly Asp Phe 280	Ser Asn Met Leu His 285
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Ala Thr Asn Asn	Pro 320	Arg Leu Ser Tyr Ile 325	His Pro Asn Ala Phe 330
Phe Arg Leu Pro	Lys 335	Leu Glu Ser Leu Met 340	Leu Asn Ser Asn Ala 345
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P1618P2C3 sequence listing.txt

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Pro Leu Ile Ala	Pro 425	Glu Ser Phe Pro	Ser 430	Asn Leu Asn Val Glu 435
Ala Gly Ser Tyr	Val 440	Ser Phe His Cys	Arg 445	Ala Thr Ala Glu Pro 450
Gln Pro Glu Ile	Tyr 455	Trp Ile Thr Pro	Ser 460	Gly Gln Lys Leu Leu 465
Pro Asn Thr Leu	Thr 470	Asp Lys Phe Tyr	Val 475	His Ser Glu Gly Thr 480
Leu Asp Ile Asn	Gly 485	Val Thr Pro Lys	Glu 490	Gly Gly Leu Tyr Thr 495
Cys Ile Ala Thr	Asn 500	Leu Val Gly Ala	Asp 505	Leu Lys Ser Val Met 510
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Ala Phe Val Lys	Thr 560	Glu Asn Ser His	Ala 565	Ala Gln Ser Ala Arg 570
Ile Pro Ser Asp	Val 575	Lys Val Tyr Asn	Leu 580	Thr His Leu Asn Pro 585
Ser Thr Glu Tyr	Lys 590	Ile Cys Ile Asp	Ile 595	Pro Thr Ile Tyr Gln 600
Lys Asn Arg Lys	Lys 605	Cys Val Asn Val	Thr 610	Thr Lys Gly Leu His 615
Pro Asp Gln Lys	Glu 620	Tyr Glu Lys Asn	Asn 625	Thr Thr Thr Leu Met 630
Ala Cys Leu Gly	Gly 635	Leu Leu Gly Ile	Ile 640	Gly Val Ile Cys Leu 645
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670  
675

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<213> Homo Sapien
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 <212> PRT  
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 65 70 75  
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 80 85 90  
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 140 145 150  
 Cys Thr Leu Gln Gln Val Leu Arg Ser Met Ala Ser Asn His Glu  
 155 160 165  
 Thr Ala His Asn Val Ile Cys Lys Thr Ser Val Leu Asp Glu His  
 170 175 180  
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 185 190 195  
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 200 205 210  
 Phe Gly Trp Phe Thr Met Val Ile Ser Tyr Val Val Tyr Tyr Val  
 215 220 225  
 Arg Gln Asn Gln Glu Asp Ala Arg Arg His Leu Glu Tyr Leu Lys  
 230 235 240  
 Ser Leu Pro Ser Arg Gln Lys Lys Ala Asp Glu Pro Asp Asp Ile

245

Ser Thr Val Val

<210> 72  
<211> 2290  
<212> DNA  
<213> Homo Sapien

<400> 72  
accgagccga gcggaccgaa ggcgcgccc agatgcaggt gagcaagagg 50  
atgctggcgg ggggcgtgag gagcatgccc agccccctcc tggcctgctg 100  
gcagcccatc ctctgctgg tgctgggctc agtgctgtca ggctcggcca 150  
cgggctgccc gcccgcgtgc gaggctccg cccaggaccg cgctgtgctg 200  
tgccaccgca agtgctttgt ggcagtcccc gagggcatcc ccaccgagac 250  
gcgcctgctg gacctaggca agaaccgcat caaaacgctc aaccaggacg 300  
agttcgccag cttcccgac ctggaggagc tggagctcaa cgagaacatc 350  
gtgagcgccg tggagcccgg cgccttcaac aacctcttca acctccggac 400  
gctgggtctc cgagcaacc gcctgaagct catcccgcta ggctcttca 450  
ctggcctcag caacctgacc aagcaggaca tcagcgagaa caagatcggt 500  
atcctactgg actacatggt tcaggacctg tacaacctca agtactgga 550  
ggttggcgac aatgacctg tctacatctc tcaccgcgcc ttcagcggcc 600  
tcaacagcct ggagcagctg acgctggaga aatgcaacct gacctccatc 650  
cccaccgagg cgctgtcca cctgcacggc ctcatcgctc tgaggctccg 700  
gcacctcaac atcaatgcca tccgggacta ctcttcaag aggctgtacc 750  
gactcaaggc cttggagatc tccactggc cctacttgga caccatgaca 800  
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caatctgacc gctgtgccct acctggccgt ccgccaccta gtctatctcc 900  
gcttctcaa cctctctac aaccccatca gcaccattga gggctccatg 950  
ttgcatgagc tgctccggct gcaggagatc cagctggtgg gcgggcagct 1000  
ggccgtggtg gagccctatg cttccgcgg cctcaactac ctgcgcgtgc 1050  
tcaatgtctc tggcaaccag ctgaccacac tggaggaatc agtcttcac 1100  
tcggtgggca acctggagac actcatctg gactccaacc cgctggcctg 1150  
cgactgtcgg ctctgtggg tgttccggcg ccgctggcg ctcaacttca 1200  
accggcagca gccacgtgc gccacgccg agtttgtcca gggcaaggag 1250  
ttcaaggact tccctgatgt gctactgccc aactacttca cctgccgccg 1300

P1618P2C3 sequence listing.txt

cgcccgcatc cgggaccgca agggccagca ggtgtttgtg gacgagggcc 1350  
acacggtgca gtttgtgtgc cgggccgatg gcgacccgcc gcccgccatc 1400  
ctctggctct caccgccaaa gcacctggtc tcagccaaga gcaatgggcg 1450  
gctcacagtc ttccctgatg gcacgctgga ggtgctgtac gccaggtac 1500  
aggacaacgg caggtacctg tgcctgcgg ccaacgcggg cggcaacgac 1550  
tccatgcccg cccacctgca tgtgctgagc tactcggccg actggcccca 1600  
tcagcccaac aagaccttcg ctttcatctc caaccagccg ggcgagggag 1650  
aggccaacag caccgcgcc actgtgcctt tccccttcga catcaagacc 1700  
ctcatcatcg ccaccaccat gggcttcac tcttctctgg gcgtcgtcct 1750  
cttctgcctg gtgtgtgtgt ttctctggag ccgggggcaag ggcaacacaa 1800  
agcacaacat cgagatcgag tatgtgcccc gaaagtcgga cgcagggcatc 1850  
agctccgccg acgcgccccg caagttcaac atgaagatga tatgaggccg 1900  
gggccccggg cagggacccc cgggccccg ggcaggggaa ggggcctggt 1950  
cgccacctgc tcaacttcca gtccttccca cctcctccct acccttctac 2000  
acacgttctc tttctccctc ccgcctccgt cccctgctgc cccccgccag 2050  
ccctcaccac ctgcccctct tctaccagga cctcagaagc ccagacctgg 2100  
ggacccccacc tacacagggg cattgacaga ctggagttga aagccgacga 2150  
accgacacgc ggcagagtca ataattcaat aaaaaagtta cgaactttct 2200  
ctgtaacttg ggtttcaata attatggatt tttatgaaaa cttgaaataa 2250  
taaaaagaga aaaaaactaa aaaaaaaaaa aaaaaaaaaa 2290

<210> 73  
<211> 620  
<212> PRT  
<213> Homo Sapien

<400> 73  
Met Gln Val Ser Lys Arg Met Leu Ala Gly Gly Val Arg Ser Met  
1 5 10 15  
Pro Ser Pro Leu Leu Ala Cys Trp Gln Pro Ile Leu Leu Leu Val  
20 25 30  
Leu Gly Ser Val Leu Ser Gly Ser Ala Thr Gly Cys Pro Pro Arg  
35 40 45  
Cys Glu Cys Ser Ala Gln Asp Arg Ala Val Leu Cys His Arg Lys  
50 55 60  
Cys Phe Val Ala Val Pro Glu Gly Ile Pro Thr Glu Thr Arg Leu  
65 70 75  
Leu Asp Leu Gly Lys Asn Arg Ile Lys Thr Leu Asn Gln Asp Glu  
80 85 90



P1618P2C3 sequence listing.txt

Phe	Ala	Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn
				95					100					105
Ile	Val	Ser	Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn
				110					115					120
Leu	Arg	Thr	Leu	Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro
				125					130					135
Leu	Gly	Val	Phe	Thr	Gly	Leu	Ser	Asn	Leu	Thr	Lys	Gln	Asp	Ile
				140					145					150
Ser	Glu	Asn	Lys	Ile	Val	Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp
				155					160					165
Leu	Tyr	Asn	Leu	Lys	Ser	Leu	Glu	Val	Gly	Asp	Asn	Asp	Leu	Val
				170					175					180
Tyr	Ile	Ser	His	Arg	Ala	Phe	Ser	Gly	Leu	Asn	Ser	Leu	Glu	Gln
				185					190					195
Leu	Thr	Leu	Glu	Lys	Cys	Asn	Leu	Thr	Ser	Ile	Pro	Thr	Glu	Ala
				200					205					210
Leu	Ser	His	Leu	His	Gly	Leu	Ile	Val	Leu	Arg	Leu	Arg	His	Leu
				215					220					225
Asn	Ile	Asn	Ala	Ile	Arg	Asp	Tyr	Ser	Phe	Lys	Arg	Leu	Tyr	Arg
				230					235					240
Leu	Lys	Val	Leu	Glu	Ile	Ser	His	Trp	Pro	Tyr	Leu	Asp	Thr	Met
				245					250					255
Thr	Pro	Asn	Cys	Leu	Tyr	Gly	Leu	Asn	Leu	Thr	Ser	Leu	Ser	Ile
				260					265					270
Thr	His	Cys	Asn	Leu	Thr	Ala	Val	Pro	Tyr	Leu	Ala	Val	Arg	His
				275					280					285
Leu	Val	Tyr	Leu	Arg	Phe	Leu	Asn	Leu	Ser	Tyr	Asn	Pro	Ile	Ser
				290					295					300
Thr	Ile	Glu	Gly	Ser	Met	Leu	His	Glu	Leu	Leu	Arg	Leu	Gln	Glu
				305					310					315
Ile	Gln	Leu	Val	Gly	Gly	Gln	Leu	Ala	Val	Val	Glu	Pro	Tyr	Ala
				320					325					330
Phe	Arg	Gly	Leu	Asn	Tyr	Leu	Arg	Val	Leu	Asn	Val	Ser	Gly	Asn
				335					340					345
Gln	Leu	Thr	Thr	Leu	Glu	Glu	Ser	Val	Phe	His	Ser	Val	Gly	Asn
				350					355					360
Leu	Glu	Thr	Leu	Ile	Leu	Asp	Ser	Asn	Pro	Leu	Ala	Cys	Asp	Cys
				365					370					375
Arg	Leu	Leu	Trp	Val	Phe	Arg	Arg	Arg	Trp	Arg	Leu	Asn	Phe	Asn
				380					385					390
Arg	Gln	Gln	Pro	Thr	Cys	Ala	Thr	Pro	Glu	Phe	Val	Gln	Gly	Lys
				395					400					405

P1618P2C3 sequence listing.txt

Glu Phe Lys Asp Phe	Pro Asp Val Leu	Leu	Pro Asn Tyr Phe	Thr
410		415		420
Cys Arg Arg Ala Arg	Ile Arg Asp Arg	Lys	Ala Gln Gln Val	Phe
425		430		435
Val Asp Glu Gly His	Thr Val Gln Phe	Val	Cys Arg Ala Asp	Gly
440		445		450
Asp Pro Pro Pro Ala	Ile Leu Trp Leu	Ser	Pro Arg Lys His	Leu
455		460		465
Val Ser Ala Lys Ser	Asn Gly Arg Leu	Thr	Val Phe Pro Asp	Gly
470		475		480
Thr Leu Glu Val Arg	Tyr Ala Gln Val	Gln	Asp Asn Gly Thr	Tyr
485		490		495
Leu Cys Ile Ala Ala	Asn Ala Gly Gly	Asn	Asp Ser Met Pro	Ala
500		505		510
His Leu His Val Arg	Ser Tyr Ser Pro	Asp	Trp Pro His Gln	Pro
515		520		525
Asn Lys Thr Phe Ala	Phe Ile Ser Asn	Gln	Pro Gly Glu Gly	Glu
530		535		540
Ala Asn Ser Thr Arg	Ala Thr Val Pro	Phe	Pro Phe Asp Ile	Lys
545		550		555
Thr Leu Ile Ile Ala	Thr Thr Met Gly	Phe	Ile Ser Phe Leu	Gly
560		565		570
Val Val Leu Phe Cys	Leu Val Leu Leu	Phe	Leu Trp Ser Arg	Gly
575		580		585
Lys Gly Asn Thr Lys	His Asn Ile Glu	Ile	Glu Tyr Val Pro	Arg
590		595		600
Lys Ser Asp Ala Gly	Ile Ser Ser Ala	Asp	Ala Pro Arg Lys	Phe
605		610		615
Asn Met Lys Met Ile				
620				

<210> 74

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 74

tcacctggag cctttattgg cc 22

<210> 75

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

P1618P2C3 sequence listing.txt

<223> Synthetic Oligonucleotide Probe

<400> 75

ataccagcta taaccaggct gcg 23

<210> 76

<211> 52

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe.

<400> 76

caacagtaag tggtttgatg ctcttccaaa tctagagatt ctgatgattg 50

gg 52

<210> 77

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 77

ccatgtgtct cctcctacaa ag 22

<210> 78

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 78

gggaatagat gtgatctgat tgg 23

<210> 79

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 79

cacctgtagc aatgcaaadc tcaaggaaat acctagagat cttcctcctg 50

<210> 80

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 80

agcaaccgcc tgaagctcat cc 22

<210> 81

P1618P2C3 sequence listing.txt

<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 81  
aaggcgcggt gaaagatgta gacg 24

<210> 82  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 82  
gactacatgt ttcaggacct gtacaacctc aagtcactgg aggttggcga 50

<210> 83  
<211> 1685  
<212> DNA  
<213> Homo Sapien

<400> 83  
cccacgcgtc cgcacctcgg ccccgggctc cgaagcggct cgggggcgcc 50  
ctttcgggtca acatcgtagt ccacccccctc cccatcccca gccccgggg 100  
attcaggctc gccagcggc agccaggag cgggccggga agcgcgatgg 150  
gggccccagc cgcctcgtc ctgtctctgc tctgtctgtt cgctgtctgc 200  
tgggcgcccc gcggggcca cctctcccag gacgacagcc agccctggac 250  
atctgatgaa acagtgggtg ctggtggcac cgtggtgctc aagtgccaa 300  
tgaaagatca cgaggactca tccctgcaat ggtctaacc tgctcagcag 350  
actctctact ttggggagaa gagagccctt cgagataatc gaattcagct 400  
ggttacctct acgccccacg agctcagcat cagcatcagc aatgtggccc 450  
tggcagacga gggcgagtac acctgtctca tcttactat gcctgtgcga 500  
actgccaagt ccctcgtcac tgtgctagga attccacaga agcccatcat 550  
cactggttat aaatcttcat tacgggaaaa agacacagcc accctaaact 600  
gtcagtcttc tgggagcaag cctgcagccc ggctcacctg gagaaaggg 650  
gaccaagaac tccacggaga accaaccgc atacaggaag atcccaatgg 700  
taaaaccttc actgtcagca gctcgggtgac attccagggt acccgggagg 750  
atgatggggc gagcatcgtg tgctctgtga accatgaatc tctaaaggga 800  
gctgacagat ccacctctca acgcattgaa gttttataca caccaactgc 850  
gatgattagg ccagaccctc cccatcctcg tgagggccag aagctgttgc 900

P1618P2C3 sequence listing.txt

tacactgtga gggtcgcggc aatccagtcc cccagcagta cctatgggag 950  
aaggagggca gtgtgccacc cctgaagatg acccaggaga gtgccctgat 1000  
cttccctttc ctcaacaaga gtgacagtgg cacctacggc tgcacagcca 1050  
ccagcaacat gggcagctac aaggcctact acaccctcaa tgtaaatgac 1100  
cccagtcgga tgccctctc ctccagcacc taccacgcca tcatcggtgg 1150  
gatcgtggct ttcatgtgtt tctgtgtgt catcatgctc atcttccttg 1200  
gccactactt gatccggcac aaaggaacct acctgacaca tgaggcaaaa 1250  
ggctccgacg atgtccaga cgcgacacg gccatcatca atgcagaagg 1300  
cgggcagtcg ggaggggacg acaagaagga atatttcac tagaggcgcc 1350  
tgccacttc ctgcgcccc caggggccc gtggggactg ctggggccgt 1400  
caccaaccg gacttgata gagcaaccgc agggccgccc ctcccgcttg 1450  
ctcccagcc caccacccc cctgtacaga atgtctgctt tgggtgcggt 1500  
tttgactcgt gtttggaatg gggagggagg agggcgggg gaggggagg 1550  
ttgccctcag cctttccgt ggcttctctg catttgggtt attattattt 1600  
ttgtaacaat cccaaatcaa atctgtctcc aggctggaga ggcaggagcc 1650  
ctggggtgag aaaagcaaaa aacaaacaaa aaaca 1685

<210> 84  
<211> 398  
<212> PRT  
<213> Homo Sapien

<400> 84  
Met Gly Ala Pro Ala Ala Ser Leu Leu Leu Leu Leu Leu Phe  
1 5 10 15  
Ala Cys Cys Trp Ala Pro Gly Gly Ala Asn Leu Ser Gln Asp Asp  
20 25 30  
Ser Gln Pro Trp Thr Ser Asp Glu Thr Val Val Ala Gly Gly Thr  
35 40 45  
Val Val Leu Lys Cys Gln Val Lys Asp His Glu Asp Ser Ser Leu  
50 55 60  
Gln Trp Ser Asn Pro Ala Gln Gln Thr Leu Tyr Phe Gly Glu Lys  
65 70 75  
Arg Ala Leu Arg Asp Asn Arg Ile Gln Leu Val Thr Ser Thr Pro  
80 85 90  
His Glu Leu Ser Ile Ser Ile Ser Asn Val Ala Leu Ala Asp Glu  
95 100 105  
Gly Glu Tyr Thr Cys Ser Ile Phe Thr Met Pro Val Arg Thr Ala  
110 115 120  
Lys Ser Leu Val Thr Val Leu Gly Ile Pro Gln Lys Pro Ile Ile

P1618P2C3 sequence listing.txt

125		130		135
Thr Gly Tyr Lys	Ser Ser Leu Arg Glu	Lys Asp Thr Ala Thr	Leu	
	140	145	150	
Asn Cys Gln Ser	Ser Gly Ser Lys Pro	Ala Ala Arg Leu Thr	Trp	
	155	160	165	
Arg Lys Gly Asp	Gln Glu Leu His Gly	Glu Pro Thr Arg Ile	Gln	
	170	175	180	
Glu Asp Pro Asn	Gly Lys Thr Phe Thr	Val Ser Ser Ser Val	Thr	
	185	190	195	
Phe Gln Val Thr	Arg Glu Asp Asp Gly	Ala Ser Ile Val Cys	Ser	
	200	205	210	
Val Asn His Glu	Ser Leu Lys Gly Ala	Asp Arg Ser Thr Ser	Gln	
	215	220	225	
Arg Ile Glu Val	Leu Tyr Thr Pro Thr	Ala Met Ile Arg Pro	Asp	
	230	235	240	
Pro Pro His Pro	Arg Glu Gly Gln Lys	Leu Leu Leu His Cys	Glu	
	245	250	255	
Gly Arg Gly Asn	Pro Val Pro Gln Gln	Tyr Leu Trp Glu Lys	Glu	
	260	265	270	
Gly Ser Val Pro	Pro Leu Lys Met Thr	Gln Glu Ser Ala Leu	Ile	
	275	280	285	
Phe Pro Phe Leu	Asn Lys Ser Asp Ser	Gly Thr Tyr Gly Cys	Thr	
	290	295	300	
Ala Thr Ser Asn	Met Gly Ser Tyr Lys	Ala Tyr Tyr Thr Leu	Asn	
	305	310	315	
Val Asn Asp Pro	Ser Pro Val Pro Ser	Ser Ser Ser Thr Tyr	His	
	320	325	330	
Ala Ile Ile Gly	Gly Ile Val Ala Phe	Ile Val Phe Leu Leu	Leu	
	335	340	345	
Ile Met Leu Ile	Phe Leu Gly His Tyr	Leu Ile Arg His Lys	Gly	
	350	355	360	
Thr Tyr Leu Thr	His Glu Ala Lys Gly	Ser Asp Asp Ala Pro	Asp	
	365	370	375	
Ala Asp Thr Ala	Ile Ile Asn Ala Glu	Gly Gly Gln ser Gly	Gly	
	380	385	390	
Asp Asp Lys Lys	Glu Tyr Phe Ile			
	395			

<210> 85

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

P1618P2C3 sequence listing.txt

<400> 85  
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<210> 86  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 86  
aacctggaat gtcaccgagc tg 22

<210> 87  
<211> 26  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 87  
cctagcacag tgacgaggga cttggc 26

<210> 88  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 88  
aagacacagc caccctaaac tgtcagtctt ctgggagcaa gcctgcagcc 50

<210> 89  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Sequence

<400> 89  
gccctggcag acgagggcga gtacacctgc tcaatcttca ctatgcctgt 50

<210> 90  
<211> 2755  
<212> DNA  
<213> Homo Sapien

<400> 90  
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ctcctttcct ggcttcggac attggagcac taaatgaact tgaattgtgt 100  
ctgtggcgag caggatggtc gctgttactt tgtgatgaga tcggggatga 150  
attgctcgct ttaaaaatgc tgctttggat tctgttgctg gagacgtctc 200  
tttgttttgc cgctggaaac gttacagggg acgtttgcaa agagaagatc 250

P1618P2C3 sequence listing.txt

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 gggcttcaca agtctgcagc gtttcaactgc cccgacttcc cagttttacc 350  
 atttatttct gcatggcaat tccctcactc gacttttccc taatgagttc 400  
 gctaactttt ataatgcggt tagtttgacac atggaaaaca atggcttgca 450  
 tgaaatcggt ccgggggctt ttctggggct gcagctggtg aaaaggctgc 500  
 acatcaacaa caacaagatc aagtcttttc gaaagcagac ttttctgggg 550  
 ctggacgac tggaatatct ccaggctgat tttaatttat tacgagatat 600  
 agaccggggg gccttcagg acttgaacaa gctggagggtg ctcatttta 650  
 atgacaatct catcagcacc ctacctgcca acgtgttcca gtatgtgccc 700  
 atcacccacc tcgacctcg gggtaacagg ctgaaaacgc tgccctatga 750  
 ggaggtcttg gagcaaatcc ctggtattgc ggagatcctg ctagaggata 800  
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 aacattccca agaatgccct gatcgccga gtggtctgag aagccccac 900  
 cagactgcag ggtaaagacc tcaatgaaac caccgaacag gacttgtgtc 950  
 ctttgaaaaa ccgagtggat tctagtctcc cggcgcccc tgccaagaa 1000  
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 caggcaactg gcagatcaaa atcagaccca cagcagcgat agcgacgggt 1150  
 agctccagga acaaaccctt agctaacagt ttaccctgcc ctgggggctg 1200  
 cagctgcgac cacatcccag ggtcgggttt aaagatgaac tgcaacaaca 1250  
 ggaacgtgag cagcttggtt gatttgaagc ccaagctctc taacgtgcag 1300  
 gagcttttcc tacgagataa caagatccac agcatccgaa aatcgactt 1350  
 tgtggattac aagaacctca ttctgttgga tctgggcaac aataacatcg 1400  
 ctactgtaga gaacaacact ttcaagaacc ttttggacct cagggtggcta 1450  
 tacatggata gcaattacct ggacacgctg tcccgggaga aattcgcggg 1500  
 gctgcaaaac ctagagtacc tgaacgtgga gtacaacgct atccagctca 1550  
 tcctcccggg cactttcaat gccatgcca aactgaggat cctcattctc 1600  
 aacaacaacc tgctgagggt cctgcctgtg gacgtgttcg ctgggggtctc 1650  
 gctctctaaa ctgagcctgc acaacaatta cttcatgtac ctcccggtgg 1700  
 caggggtgct ggaccagtta acctccatca tccagataga cctccacgga 1750  
 aaccctggg agtgctcctg cacaattgtg ctttcaagc agtgggcaga 1800



P1618P2C3 sequence listing.txt

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 tgaacttctt tagaaaggat ttcattgtcc tctccaatga cgagatctgc 1900  
 cctcagctgt acgctaggat ctcgcccacg ttaacttcgc acagtaaaaa 1950  
 cagcactggg ttggcggaga ccgggacgca ctccaactcc tacctagaca 2000  
 ccagcagggg gtccatctcg gtgttggtcc cgggactgct gctggtgttt 2050  
 gtcacctccg ccttcaccgt ggtgggcatg ctcgtgttta tcctgaggaa 2100  
 ccgaaagcgg tccaagagac gagatgcaa ctctcccgcg tccgagatta 2150  
 attccctaca gacagtctgt gactcttcct actggcacia tgggccttac 2200  
 aacgcagatg gggcccacag agtgtatgac tgtggctctc actcgtctc 2250  
 agactaagac cccaaccca ataggggagg gcagagggaa ggcgatacat 2300  
 ccttccccac cgcaggcacc ccgggggctg gaggggctg taccctaatc 2350  
 cccgcgccat cagcctggat gggcataagt agataaataa ctgtgagctc 2400  
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 ttcccctgtg gattagcccc gtgatggctc cctgttggct acgcagggat 2700  
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 ctgac 2755

<210> 91  
 <211> 696  
 <212> PRT  
 <213> Homo Sapien

<400> 91  
 Met Leu Leu Trp Ile Leu Leu Leu Glu Thr Ser Leu Cys Phe Ala  
 1 5 10 15  
 Ala Gly Asn Val Thr Gly Asp Val Cys Lys Glu Lys Ile Cys Ser  
 20 25 30  
 Cys Asn Glu Ile Glu Gly Asp Leu His Val Asp Cys Glu Lys Lys  
 35 40 45  
 Gly Phe Thr Ser Leu Gln Arg Phe Thr Ala Pro Thr Ser Gln Phe  
 50 55 60  
 Tyr His Leu Phe Leu His Gly Asn Ser Leu Thr Arg Leu Phe Pro  
 65 70 75  
 Asn Glu Phe Ala Asn Phe Tyr Asn Ala Val Ser Leu His Met Glu  
 80 85 90

P1618P2C3 sequence listing.txt

Asn	Asn	Gly	Leu	His 95	Glu	Ile	Val	Pro	Gly 100	Ala	Phe	Leu	Gly	Leu 105
Gln	Leu	Val	Lys	Arg 110	Leu	His	Ile	Asn	Asn 115	Asn	Lys	Ile	Lys	Ser 120
Phe	Arg	Lys	Gln	Thr 125	Phe	Leu	Gly	Leu	Asp 130	Asp	Leu	Glu	Tyr	Leu 135
Gln	Ala	Asp	Phe	Asn 140	Leu	Leu	Arg	Asp	Ile 145	Asp	Pro	Gly	Ala	Phe 150
Gln	Asp	Leu	Asn	Lys 155	Leu	Glu	Val	Leu	Ile 160	Leu	Asn	Asp	Asn	Leu 165
Ile	Ser	Thr	Leu	Pro 170	Ala	Asn	Val	Phe	Gln 175	Tyr	Val	Pro	Ile	Thr 180
His	Leu	Asp	Leu	Arg 185	Gly	Asn	Arg	Leu	Lys 190	Thr	Leu	Pro	Tyr	Glu 195
Glu	Val	Leu	Glu	Gln 200	Ile	Pro	Gly	Ile	Ala 205	Glu	Ile	Leu	Leu	Glu 210
Asp	Asn	Pro	Trp	Asp 215	Cys	Thr	Cys	Asp	Leu 220	Leu	Ser	Leu	Lys	Glu 225
Trp	Leu	Glu	Asn	Ile 230	Pro	Lys	Asn	Ala	Leu 235	Ile	Gly	Arg	Val	Val 240
Cys	Glu	Ala	Pro	Thr 245	Arg	Leu	Gln	Gly	Lys 250	Asp	Leu	Asn	Glu	Thr 255
Thr	Glu	Gln	Asp	Leu 260	Cys	Pro	Leu	Lys	Asn 265	Arg	Val	Asp	Ser	Ser 270
Leu	Pro	Ala	Pro	Pro 275	Ala	Gln	Glu	Glu	Thr 280	Phe	Ala	Pro	Gly	Pro 285
Leu	Pro	Thr	Pro	Phe 290	Lys	Thr	Asn	Gly	Gln 295	Glu	Asp	His	Ala	Thr 300
Pro	Gly	Ser	Ala	Pro 305	Asn	Gly	Gly	Thr	Lys 310	Ile	Pro	Gly	Asn	Trp 315
Gln	Ile	Lys	Ile	Arg 320	Pro	Thr	Ala	Ala	Ile 325	Ala	Thr	Gly	Ser	Ser 330
Arg	Asn	Lys	Pro	Leu 335	Ala	Asn	Ser	Leu	Pro 340	Cys	Pro	Gly	Gly	Cys 345
Ser	Cys	Asp	His	Ile 350	Pro	Gly	Ser	Gly	Leu 355	Lys	Met	Asn	Cys	Asn 360
Asn	Arg	Asn	Val	Ser 365	Ser	Leu	Ala	Asp	Leu 370	Lys	Pro	Lys	Leu	Ser 375
Asn	Val	Gln	Glu	Leu 380	Phe	Leu	Arg	Asp	Asn 385	Lys	Ile	His	Ser	Ile 390
Arg	Lys	Ser	His	Phe 395	Val	Asp	Tyr	Lys	Asn 400	Leu	Ile	Leu	Leu	Asp 405

P1618P2C3 sequence listing.txt

Leu Gly Asn Asn Asn Ile Ala Thr val	Glu Asn Asn Thr Phe Lys
410	415 420
Asn Leu Leu Asp Leu Arg Trp Leu Tyr	Met Asp Ser Asn Tyr Leu
425	430 435
Asp Thr Leu Ser Arg Glu Lys Phe Ala	Gly Leu Gln Asn Leu Glu
440	445 450
Tyr Leu Asn val Glu Tyr Asn Ala Ile	Gln Leu Ile Leu Pro Gly
455	460 465
Thr Phe Asn Ala Met Pro Lys Leu Arg	Ile Leu Ile Leu Asn Asn
470	475 480
Asn Leu Leu Arg Ser Leu Pro val Asp	val Phe Ala Gly val Ser
485	490 495
Leu Ser Lys Leu Ser Leu His Asn Asn	Tyr Phe Met Tyr Leu Pro
500	505 510
val Ala Gly val Leu Asp Gln Leu Thr	Ser Ile Ile Gln Ile Asp
515	520 525
Leu His Gly Asn Pro Trp Glu Cys Ser	Cys Thr Ile val Pro Phe
530	535 540
Lys Gln Trp Ala Glu Arg Leu Gly Ser	Glu val Leu Met Ser Asp
545	550 555
Leu Lys Cys Glu Thr Pro val Asn Phe	Phe Arg Lys Asp Phe Met
560	565 570
Leu Leu Ser Asn Asp Glu Ile Cys Pro	Gln Leu Tyr Ala Arg Ile
575	580 585
Ser Pro Thr Leu Thr Ser His Ser Lys	Asn Ser Thr Gly Leu Ala
590	595 600
Glu Thr Gly Thr His Ser Asn Ser Tyr	Leu Asp Thr Ser Arg val
605	610 615
Ser Ile Ser val Leu val Pro Gly Leu	Leu Leu val Phe val Thr
620	625 630
Ser Ala Phe Thr val val Gly Met Leu	val Phe Ile Leu Arg Asn
635	640 645
Arg Lys Arg Ser Lys Arg Arg Asp Ala	Asn Ser Ser Ala Ser Glu
650	655 660
Ile Asn Ser Leu Gln Thr val Cys Asp	Ser Ser Tyr Trp His Asn
665	670 675
Gly Pro Tyr Asn Ala Asp Gly Ala His	Arg val Tyr Asp Cys Gly
680	685 690
Ser His Ser Leu Ser Asp	
695	

<210> 92

<211> 22

P1618P2C3 sequence listing.txt

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<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 92
gttgatctg ggcaacaata ac 22

<210> 93
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 93
attgtgtgc aggctgagtt taag 24

<210> 94
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 94
ggtggctata catgtagc aattacctg acacgctgtc ccggg 45

<210> 95
<211> 2226
<212> DNA
<213> Homo Sapien

<400> 95
agtgcactgc gtccctgta cccggcgcca gctgtgttcc tgacccaga 50
ataactcagg gctgcaccgg gcctggcagc gctccgcaca catttcctgt 100
cgcggcctaa gggaaactgt tggccgctgg gcccgcgggg ggattcttgg 150
cagttggggg gtccgtcggg agcgagggcg gaggggaagg gagggggaac 200
cgggttgggg aagccagctg tagagggcgg tgaccgcgct ccagacacag 250
ctctgcgtcc tcgagcggga cagatccaag ttgggagcag ctctgcgtgc 300
ggggcctcag agaatgaggg cggcgttcgc cctgtgcctc ctctggcagg 350
cgctctggcc cgggccgggc ggcggcgaac accccactgc cgaccgtgct 400
ggctgctcgg cctcgggggc ctgctacagc ctgcaccacg ctaccatgaa 450
gcggcaggcg gccgaggagg cctgcatcct gcgaggtggg gcgctcagca 500
ccgtgcgtgc gggcgccgag ctgcgcgctg tgctcgcgct cctgcgggca 550
ggcccagggc ccggaggggg ctcaaagac ctgctgttct gggtcgcact 600
ggagcgcagg cgttccact gcaccctgga gaacgagcct ttgcgggggt 650

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P1618P2C3 sequence listing.txt

tctcctggct gtcctccgac cccggcggtc tcgaaagcga cacgctgcag 700  
tgggtggagg agccccaacg ctctgcacc gcgcggagat gcgcggtact 750  
ccaggccacc ggtggggtcg agcccgagg ctggaaggag atgcgatgcc 800  
acctgcgcgc caacggctac ctgtgcaagt accagtttga ggtcttgtgt 850  
cctgcgccgc gccccggggc cgcttctaac ttgagctatc gcgcgccctt 900  
ccagctgcac agcgcgctc tggacttcag tccacctggg accgaggtga 950  
gtgcgctctg ccggggacag ctcccgatct cagttacttg catcgcggac 1000  
gaaatcggcg ctcgctggga caaactctcg ggcgatgtgt tgtgtccctg 1050  
ccccgggagg tacctccgtg ctggcaaagt cgcagagctc cctaactgcc 1100  
tagacgactt gggaggcttt gcctgcgaat gtgctacggg cttcgagctg 1150  
gggaaggacg gccgctcttg tgtgaccagt ggggaaggac agccgaccct 1200  
tggggggacc ggggtgcccc ccaggcgccc gccggccact gcaaccagcc 1250  
ccgtgccgca gagaacatgg ccaatcaggg tcgacgagaa gctgggagag 1300  
acaccacttg tccctgaaca agacaattca gtaacatcta ttcctgagat 1350  
tcctcgatgg ggatcacaga gcacgatgtc tacccttcaa atgtcccttc 1400  
aagccgagtc aaaggccact atcaccccat caggggagcgt gatttccaag 1450  
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tgaccatgac agtactgggg cttgtcaagc tctgctttca cgaaagcccc 1600  
tcttcccagc caaggaagga gtctatgggc ccgccggggc tggagagtga 1650  
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ctggcgagat cccctcttg ctctagtgat gcatagggaa acaggggaca 1800  
tgggcactcc tgtgaacagt ttttcaattt tgatgaaacg gggaaaccaag 1850  
aggaaacttac ttgtgtaact gacaatttct gcagaaatcc cccttcctct 1900  
aaattccctt tactccactg aggagctaaa tcagaactgc acactccttc 1950  
cctgatgata gaggaagtgg aagtgccttt aggatggtga tactggggga 2000  
ccgggtagtg ctggggagag atattttctt atgtttattc ggagaatttg 2050  
gagaagtgat tgaacttttc aagacattgg aaacaaatag aacacaatat 2100  
aatttacatt aaaaaataat ttctaccaa atggaaagga aatgttctat 2150  
gtgttccagg ctaggagtat attggttcga aatcccaggg aaaaaataa 2200  
aaataaaaaa ttaaaggatt gttgat 2226

P1618P2C3 sequence listing.txt

<210> 96  
 <211> 490  
 <212> PRT  
 <213> Homo Sapien

<400> 96  
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 Pro Gly Pro Gly Gly Gly Glu His Pro Thr Ala Asp Arg Ala Gly  
 20 25 30  
 Cys Ser Ala Ser Gly Ala Cys Tyr Ser Leu His His Ala Thr Met  
 35 40 45  
 Lys Arg Gln Ala Ala Glu Glu Ala Cys Ile Leu Arg Gly Gly Ala  
 50 55 60  
 Leu Ser Thr Val Arg Ala Gly Ala Glu Leu Arg Ala Val Leu Ala  
 65 70 75  
 Leu Leu Arg Ala Gly Pro Gly Pro Gly Gly Gly Ser Lys Asp Leu  
 80 85 90  
 Leu Phe Trp Val Ala Leu Glu Arg Arg Arg Ser His Cys Thr Leu  
 95 100 105  
 Glu Asn Glu Pro Leu Arg Gly Phe Ser Trp Leu Ser Ser Asp Pro  
 110 115 120  
 Gly Gly Leu Glu Ser Asp Thr Leu Gln Trp Val Glu Glu Pro Gln  
 125 130 135  
 Arg Ser Cys Thr Ala Arg Arg Cys Ala Val Leu Gln Ala Thr Gly  
 140 145 150  
 Gly Val Glu Pro Ala Gly Trp Lys Glu Met Arg Cys His Leu Arg  
 155 160 165  
 Ala Asn Gly Tyr Leu Cys Lys Tyr Gln Phe Glu Val Leu Cys Pro  
 170 175 180  
 Ala Pro Arg Pro Gly Ala Ala Ser Asn Leu Ser Tyr Arg Ala Pro  
 185 190 195  
 Phe Gln Leu His Ser Ala Ala Leu Asp Phe Ser Pro Pro Gly Thr  
 200 205 210  
 Glu Val Ser Ala Leu Cys Arg Gly Gln Leu Pro Ile Ser Val Thr  
 215 220 225  
 Cys Ile Ala Asp Glu Ile Gly Ala Arg Trp Asp Lys Leu Ser Gly  
 230 235 240  
 Asp Val Leu Cys Pro Cys Pro Gly Arg Tyr Leu Arg Ala Gly Lys  
 245 250 255  
 Cys Ala Glu Leu Pro Asn Cys Leu Asp Asp Leu Gly Gly Phe Ala  
 260 265 270  
 Cys Glu Cys Ala Thr Gly Phe Glu Leu Gly Lys Asp Gly Arg Ser  
 275 280 285

P1618P2C3 sequence listing.txt

Cys	Val	Thr	Ser	Gly	Glu	Gly	Gln	Pro	Thr	Leu	Gly	Gly	Thr	Gly
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Val	Pro	Thr	Arg	Arg	Pro	Pro	Ala	Thr	Ala	Thr	Ser	Pro	Val	Pro
				305					310					315
Gln	Arg	Thr	Trp	Pro	Ile	Arg	Val	Asp	Glu	Lys	Leu	Gly	Glu	Thr
				320					325					330
Pro	Leu	Val	Pro	Glu	Gln	Asp	Asn	Ser	Val	Thr	Ser	Ile	Pro	Glu
				335					340					345
Ile	Pro	Arg	Trp	Gly	Ser	Gln	Ser	Thr	Met	Ser	Thr	Leu	Gln	Met
				350					355					360
Ser	Leu	Gln	Ala	Glu	Ser	Lys	Ala	Thr	Ile	Thr	Pro	Ser	Gly	Ser
				365					370					375
Val	Ile	Ser	Lys	Phe	Asn	Ser	Thr	Thr	Ser	Ser	Ala	Thr	Pro	Gln
				380					385					390
Ala	Phe	Asp	Ser	Ser	Ser	Ala	Val	Val	Phe	Ile	Phe	Val	Ser	Thr
				395					400					405
Ala	Val	Val	Val	Leu	Val	Ile	Leu	Thr	Met	Thr	Val	Leu	Gly	Leu
				410					415					420
Val	Lys	Leu	Cys	Phe	His	Glu	Ser	Pro	Ser	Ser	Gln	Pro	Arg	Lys
				425					430					435
Glu	Ser	Met	Gly	Pro	Pro	Gly	Leu	Glu	Ser	Asp	Pro	Glu	Pro	Ala
				440					445					450
Ala	Leu	Gly	Ser	Ser	Ser	Ala	His	Cys	Thr	Asn	Asn	Gly	Val	Lys
				455					460					465
Val	Gly	Asp	Cys	Asp	Leu	Arg	Asp	Arg	Ala	Glu	Gly	Ala	Leu	Leu
				470					475					480
Ala	Glu	Ser	Pro	Leu	Gly	Ser	Ser	Asp	Ala					
				485					490					

<210> 97

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 97

tggaaggaga tgcatgccca cctg 24

<210> 98

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 98

P1618P2C3 sequence listing.txt

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tgaccagtgg ggaaggacag 20
<210> 99
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 99
acagagcaga ggggtgccttg 20

<210> 100
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 100
tcagggacaa gtggtgtctc tccc 24

<210> 101
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 101
tcaggaagg agtgtgcagt tctg 24

<210> 102
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 102
acagctcccg atctcagtta cttgcatcgc ggacgaaatc ggcgctcgct 50

<210> 103
<211> 2026
<212> DNA
<213> Homo Sapien

<400> 103
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ggggaaacta agcgtcgagt cagacggcac cataatcgcc tttaaaagtg 100
cctccgccct gccggccgcg tatcccccg ctacctgggc cgccccgcgg 150
cggtcgcgcg gtgagagggg gcgcgcgggc agccgagcgc cgggtgtgagc 200
cagcgtgtgt gccagtgtga gcggcgggtg gagcgcgggtg ggtgcggagg 250
ggcgtgtgtg ccggcgcgcg cgccgtgggg tgcaaaccct gagcgtctac 300

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P1618P2C3 sequence listing.txt

gctgccatga ggggcgcgaa cgcctgggcg ccactctgcc tgctgctggc 350  
 tgccgccacc cagctctcgc ggcagcagtc cccagagaga cctgttttca 400  
 catgtggtgg cattcttact ggagagtctg gatttattgg cagtgaaggt 450  
 tttcctggag tgtaccctcc aaatagcaaa tgtacttgga aaatcacagt 500  
 tcccgaagga aaagtagtcg ttctcaattt ccgattcata gacctcgaga 550  
 gtgacaacct gtgccgctat gactttgtgg atgtgtacaa tggccatgcc 600  
 aatggccagc gcattggccg cttctgtggc actttccggc ctggagccct 650  
 tgtgtccagt ggcaacaaga tgatggtgca gatgatttct gatgccaaca 700  
 cagctggcaa tggcttcatg gccatgttct ccgctgctga accaaacgaa 750  
 agaggggatc agtattgtgg aggactcctt gacagacctt ccggctcttt 800  
 taaaaccccc aactggccag accgggatta ccctgcagga gtcacttggtg 850  
 tgtggcacat tgtagcccca agaatacagc ttatagaatt aaagtttgag 900  
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 gtgatagtcc acctgcgcca attgtgtctg agagaaatga acttcttatt 1050  
 cagtttttat cagacttaag tttaactgca gatgggttta ttggtcacta 1100  
 catattcagg ccaaaaaaac tgcctacaac tacagaacag cctgtcacca 1150  
 ccacattccc tgtaaccacg ggttttaaac ccaccgtggc cttgtgtcaa 1200  
 caaaagtgtg gacggacggg gactctggag ggcaattatt gttcaagtga 1250  
 ctttgtatta gccggcactg ttatcacaac catcactcgc gatgggagtt 1300  
 tgcacgccac agtctcgatc atcaacatct acaaagaggg aaatttggcg 1350  
 attcagcagg cgggcaagaa catgagtgcc aggctgactg tcgtctgcaa 1400  
 gcagtgccct ctctcagaa gaggtctaaa ttacattatt atgggccaag 1450  
 taggtgaaga tgggcgaggg aaaatcatgc caaacagctt tatcatgatg 1500  
 ttcaagacca agaatacagaa gctcctggat gccttaaaaa ataagcaatg 1550  
 ttaacagtga actgtgtcca ttaagctgt attctgcat tgcctttgaa 1600  
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 ctgaaagagg attccgaaag atgggactgg ttgactcttc acatgatgga 1700  
 ggtatgaggc ctccgagata gctgagggaa gttctttgcc tgctgtcaga 1750  
 ggagcagcta tctgattgga aacctgccga cttagtgcgg tgataggaag 1800  
 ctaaaagtgt caagcgttga cagcttgga gcgtttattt atacatctct 1850

P1618P2C3 sequence listing.txt

gtaaaaggat attttagaat tgagttgtgt gaagatgtca aaaaaagatt 1900  
 ttagaagtc aatatttata gtgttatttg tttcaccttc aagcctttgc 1950  
 cctgaggtgt tacaatcttg tcttgcgttt tctaaatcaa tgcttaataa 2000  
 aatattttta aaggaaaaaa aaaaaa 2026

<210> 104  
 <211> 415  
 <212> PRT  
 <213> Homo Sapien

<400> 104  
 Met Arg Gly Ala Asn Ala Trp Ala Pro Leu Cys Leu Leu Leu Ala  
 1 5 10 15  
 Ala Ala Thr Gln Leu Ser Arg Gln Gln Ser Pro Glu Arg Pro Val  
 20 25 30  
 Phe Thr Cys Gly Gly Ile Leu Thr Gly Glu Ser Gly Phe Ile Gly  
 35 40 45  
 Ser Glu Gly Phe Pro Gly Val Tyr Pro Pro Asn Ser Lys Cys Thr  
 50 55 60  
 Trp Lys Ile Thr Val Pro Glu Gly Lys Val Val Val Leu Asn Phe  
 65 70 75  
 Arg Phe Ile Asp Leu Glu Ser Asp Asn Leu Cys Arg Tyr Asp Phe  
 80 85 90  
 Val Asp Val Tyr Asn Gly His Ala Asn Gly Gln Arg Ile Gly Arg  
 95 100 105  
 Phe Cys Gly Thr Phe Arg Pro Gly Ala Leu Val Ser Ser Gly Asn  
 110 115 120  
 Lys Met Met Val Gln Met Ile Ser Asp Ala Asn Thr Ala Gly Asn  
 125 130 135  
 Gly Phe Met Ala Met Phe Ser Ala Ala Glu Pro Asn Glu Arg Gly  
 140 145 150  
 Asp Gln Tyr Cys Gly Gly Leu Leu Asp Arg Pro Ser Gly Ser Phe  
 155 160 165  
 Lys Thr Pro Asn Trp Pro Asp Arg Asp Tyr Pro Ala Gly Val Thr  
 170 175 180  
 Cys Val Trp His Ile Val Ala Pro Lys Asn Gln Leu Ile Glu Leu  
 185 190 195  
 Lys Phe Glu Lys Phe Asp Val Glu Arg Asp Asn Tyr Cys Arg Tyr  
 200 205 210  
 Asp Tyr Val Ala Val Phe Asn Gly Gly Glu Val Asn Asp Ala Arg  
 215 220 225  
 Arg Ile Gly Lys Tyr Cys Gly Asp Ser Pro Pro Ala Pro Ile Val  
 230 235 240  
 Ser Glu Arg Asn Glu Leu Leu Ile Gln Phe Leu Ser Asp Leu Ser

P1618P2C3 sequence listing.txt

245		250		255
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260		265		270
Lys Leu Pro Thr Thr Thr Glu Gln Pro Val Thr Thr Thr Phe Pro				
275		280		285
Val Thr Thr Gly Leu Lys Pro Thr Val Ala Leu Cys Gln Gln Lys				
290		295		300
Cys Arg Arg Thr Gly Thr Leu Glu Gly Asn Tyr Cys Ser Ser Asp				
305		310		315
Phe Val Leu Ala Gly Thr Val Ile Thr Thr Ile Thr Arg Asp Gly				
320		325		330
Ser Leu His Ala Thr Val Ser Ile Ile Asn Ile Tyr Lys Glu Gly				
335		340		345
Asn Leu Ala Ile Gln Gln Ala Gly Lys Asn Met Ser Ala Arg Leu				
350		355		360
Thr Val Val Cys Lys Gln Cys Pro Leu Leu Arg Arg Gly Leu Asn				
365		370		375
Tyr Ile Ile Met Gly Gln Val Gly Glu Asp Gly Arg Gly Lys Ile				
380		385		390
Met Pro Asn Ser Phe Ile Met Met Phe Lys Thr Lys Asn Gln Lys				
395		400		405
Leu Leu Asp Ala Leu Lys Asn Lys Gln Cys				
410		415		

<210> 105

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide Probe

<400> 105

ccgattcata gacctcgaga gt 22

<210> 106

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide Probe

<400> 106

gtcaaggagt cctccacaat ac 22

<210> 107

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

P1618P2C3 sequence listing.txt  
<223> Synthetic Oligonucleotide Probe

<400> 107  
gtgtacaatg gccatgccaa tggccagcgc attggccgct tctgt 45

<210> 108  
<211> 1838  
<212> DNA  
<213> Homo Sapien

<400> 108  
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agatggcccc atggcccccg aagggcctag tcccagctgt gctctggggc 150  
ctcagcctct tcctcaacct cccaggacct atctggctcc agccctctcc 200  
acctccccag tcttctcccc cgcctcagcc ccatccgtgt catacctgcc 250  
ggggactggg tgacagcttt aacaagggcc tggagagaac catccgggac 300  
aactttggag gtggaaacac tgcctgggag gaagagaatt tgtccaaata 350  
caaagacagt gagaccgcc tggtagaggt gctggagggt gtgtgcagca 400  
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gagagctggg ggtttcacaa gcagcaggag gccccggacc tcttccagtg 500  
gctgtgctca gattccctga agctctgctg ccccgaggc accttcgggc 550  
cctcctgcct tccctgtcct gggggaacag agaggccctg cgggtggctac 600  
gggcagtggtg aaggagaagg gacacgaggg ggcagcgggc actgtgactg 650  
ccaagccggc tacgggggtg aggcctgtgg ccagtgtggc cttggctact 700  
ttgaggcaga acgcaacgcc agccatctgg tatgttcggc ttgttttggc 750  
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gaagggtggt gccctgcac acctcaagtg tgtagacatt gatgagtgtg 850  
gcacagaggg agccaactgt ggagctgacc aattctgcgt gaacactgag 900  
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gagaacaagc agtgtgaaaa caccgagggc gggtatcgct gcatctgtgc 1100  
cgagggttac aagcagatgg aaggcatctg tgtgaaggag cagatcccag 1150  
agtcagcagg cttcttctca gagatgacag aagacgagtt ggtggtgctg 1200  
cagcagatgt tctttggcat catcatctgt gcaactggcca cgctggctgc 1250  
taagggcgac ttggtgttca ccgccatctt cattggggct gtggcgccca 1300

P1618P2C3 sequence listing.txt

tgactggcta ctggttgtca gagcgagtg accgtgtgct ggagggcttc 1350  
atcaagggca gataatcgcg gccaccacct gtaggacctc ctcccaccca 1400  
cgctgcccc agagcttggg ctgccctcct gctggacct caggacagct 1450  
tggtttatatt ttgagagtgg ggtaagcacc cctacctgcc ttacagagca 1500  
gccaggtac ccaggcccgg gcagacaagg cccctggggg aaaaagtagc 1550  
cctgaagggtg gataccatga gctcttcacc tggcggggac tggcaggctt 1600  
cacaatgtgt gaatttcaaa agtttttcct taatggtggc tgctagagct 1650  
ttggccccctg cttaggatta ggtggtcctc acaggggtgg ggccatcaca 1700  
gctccctcct gccagctgca tgctgccagt tcctgttctg tgttcaccac 1750  
atccccacac ccattgcca cttatttatt catctcagga aataaagaaa 1800  
ggtcttggaa agttaaaaaa aaaaaaaaaa aaaaaaaaaa 1838

<210> 109

<211> 420

<212> PRT

<213> Homo Sapien

<400> 109

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Gly	Leu	Ser	Leu	Phe	Leu	Asn	Leu	Pro	Gly	Pro	Ile	Trp	Leu	Gln
			20						25				30	
Pro	Ser	Pro	Pro	Pro	Gln	Ser	Ser	Pro	Pro	Pro	Gln	Pro	His	Pro
				35					40				45	
Cys	His	Thr	Cys	Arg	Gly	Leu	Val	Asp	Ser	Phe	Asn	Lys	Gly	Leu
				50					55				60	
Glu	Arg	Thr	Ile	Arg	Asp	Asn	Phe	Gly	Gly	Gly	Asn	Thr	Ala	Trp
				65					70				75	
Glu	Glu	Glu	Asn	Leu	Ser	Lys	Tyr	Lys	Asp	Ser	Glu	Thr	Arg	Leu
				80					85				90	
Val	Glu	Val	Leu	Glu	Gly	Val	Cys	Ser	Lys	Ser	Asp	Phe	Glu	Cys
				95					100				105	
His	Arg	Leu	Leu	Glu	Leu	Ser	Glu	Glu	Leu	Val	Glu	Ser	Trp	Trp
				110					115				120	
Phe	His	Lys	Gln	Gln	Glu	Ala	Pro	Asp	Leu	Phe	Gln	Trp	Leu	Cys
				125					130				135	
Ser	Asp	Ser	Leu	Lys	Leu	Cys	Cys	Pro	Ala	Gly	Thr	Phe	Gly	Pro
				140					145				150	
Ser	Cys	Leu	Pro	Cys	Pro	Gly	Gly	Thr	Glu	Arg	Pro	Cys	Gly	Gly
				155					160				165	
Tyr	Gly	Gln	Cys	Glu	Gly	Glu	Gly	Thr	Arg	Gly	Gly	Ser	Gly	His
				170					175				180	

P1618P2C3 sequence listing.txt

Cys	Asp	Cys	Gln	Ala	Gly	Tyr	Gly	Gly	Glu	Ala	Cys	Gly	Gln	Cys	185	190	195
Gly	Leu	Gly	Tyr	Phe	Glu	Ala	Glu	Arg	Asn	Ala	Ser	His	Leu	Val	200	205	210
Cys	Ser	Ala	Cys	Phe	Gly	Pro	Cys	Ala	Arg	Cys	Ser	Gly	Pro	Glu	215	220	225
Glu	Ser	Asn	Cys	Leu	Gln	Cys	Lys	Lys	Gly	Trp	Ala	Leu	His	His	230	235	240
Leu	Lys	Cys	Val	Asp	Ile	Asp	Glu	Cys	Gly	Thr	Glu	Gly	Ala	Asn	245	250	255
Cys	Gly	Ala	Asp	Gln	Phe	Cys	Val	Asn	Thr	Glu	Gly	Ser	Tyr	Glu	260	265	270
Cys	Arg	Asp	Cys	Ala	Lys	Ala	Cys	Leu	Gly	Cys	Met	Gly	Ala	Gly	275	280	285
Pro	Gly	Arg	Cys	Lys	Lys	Cys	Ser	Pro	Gly	Tyr	Gln	Gln	Val	Gly	290	295	300
Ser	Lys	Cys	Leu	Asp	Val	Asp	Glu	Cys	Glu	Thr	Glu	Val	Cys	Pro	305	310	315
Gly	Glu	Asn	Lys	Gln	Cys	Glu	Asn	Thr	Glu	Gly	Gly	Tyr	Arg	Cys	320	325	330
Ile	Cys	Ala	Glu	Gly	Tyr	Lys	Gln	Met	Glu	Gly	Ile	Cys	Val	Lys	335	340	345
Glu	Gln	Ile	Pro	Glu	Ser	Ala	Gly	Phe	Phe	Ser	Glu	Met	Thr	Glu	350	355	360
Asp	Glu	Leu	Val	Val	Leu	Gln	Gln	Met	Phe	Phe	Gly	Ile	Ile	Ile	365	370	375
Cys	Ala	Leu	Ala	Thr	Leu	Ala	Ala	Lys	Gly	Asp	Leu	Val	Phe	Thr	380	385	390
Ala	Ile	Phe	Ile	Gly	Ala	Val	Ala	Ala	Met	Thr	Gly	Tyr	Trp	Leu	395	400	405
Ser	Glu	Arg	Ser	Asp	Arg	Val	Leu	Glu	Gly	Phe	Ile	Lys	Gly	Arg	410	415	420

<210> 110

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 110

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<210> 111

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 111

attctgctg aacactgagg gc 22

<210> 112

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 112

atctgcttgt agccctcggc ac 22

<210> 113

<211> 1616

<212> DNA

<213> Homo sapien

<220>

<221> unsure

<222> 1461

<223> unknown base

<400> 113

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 gtgttgcccc tggccagccc cggggccgcc ctgaccgggg agcagctcct 150  
 gggcagcctg ctgcggcagc tgcagctcaa agagggtgcc accctggaca 200  
 gggccgacat ggaggagctg gtcaccccca cccacgtgag ggcccagtac 250  
 gtggccctgc tgcagcgcag ccacggggac cgctcccgcg gaaagaggtt 300  
 cagccagagc ttccgagagg tggccggcag gttcctggcg ttggaggcca 350  
 gcacacacct gctggtgttc ggcattggagc agcggctgcc gcccaacagc 400  
 gagctggtgc aggccgtgct gcggctcttc caggagccgg tcccaaggc 450  
 cgcgctgcac aggcacgggc ggctgtcccc gcgcagcgcc cggggccggg 500  
 tgaccgtcga gtggctgcgc gtccgcgacg acggctccaa ccgcacctcc 550  
 ctcatcgact ccaggctggt gtccgtccac gagagcggct ggaaggcctt 600  
 cgacgtgacc gaggccgtga acttctggca gcagctgagc cggccccggc 650  
 agccgctgct gctacagggtg tcggtgcaga gggagcatct gggcccgtg 700  
 gcgtccggcg cccacaagct ggtccgcttt gcctcgcagg gggcgccagc 750  
 cgggcttggg gagccccagc tggagctgca caccctggac cttggggact 800  
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P1618P2C3 sequence listing.txt

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gggcctcgac agtgcacgc ctccgagact gactcgctgc ccatgatcgt 1050  
cagcatcaag gaggaggca ggaccaggcc ccagggtggtc agcctgcca 1100  
acatgagggt gcagaagtgc agctgtgcct cggatggtgc gctcgtgcca 1150  
aggaggctcc agccataggc gcctagtgtg gccatcgagg gacttgactt 1200  
gtgtgtgttt ctgaagtgtt cgagggtacc aggagagctg gcgatgactg 1250  
aactgctgat ggacaaatgc tctgtgctct ctagttagcc ctgaatttgc 1300  
ttcctctgac aagttacctc acctaatctt tgcttctcag gaatgagaat 1350  
ctttggccac tggagagccc ttgctcagtt ttctctattc ttattattca 1400  
ctgcactata ttctaagcac ttacatgtgg agatactgta acctgagggc 1450  
agaaagccca ntgtgtcatt gtttacttgt cctgtcactg gatctgggct 1500  
aaagtccctc accaccactc tggacctaag acctgggggt aagtgtgggt 1550  
tgtgcatccc caatccagat aataaagact ttgtaaaaca tgaataaaac 1600  
acattttatt ctaaaa 1616

<210> 114  
<211> 366  
<212> PRT  
<213> Homo Sapien

<400> 114  
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Ala Ser Pro Gly Ala Ala Leu Thr Gly Glu Gln Leu Leu Gly Ser  
20 25 30  
Leu Leu Arg Gln Leu Gln Leu Lys Glu Val Pro Thr Leu Asp Arg  
35 40 45  
Ala Asp Met Glu Glu Leu Val Ile Pro Thr His Val Arg Ala Gln  
50 55 60  
Tyr Val Ala Leu Leu Gln Arg Ser His Gly Asp Arg Ser Arg Gly  
65 70 75  
Lys Arg Phe Ser Gln Ser Phe Arg Glu Val Ala Gly Arg Phe Leu  
80 85 90  
Ala Leu Glu Ala Ser Thr His Leu Leu Val Phe Gly Met Glu Gln  
95 100 105  
Arg Leu Pro Pro Asn Ser Glu Leu Val Gln Ala Val Leu Arg Leu  
110 115 120



P1618P2C3 sequence listing.txt

Phe	Gln	Glu	Pro	Val	Pro	Lys	Ala	Ala	Leu	His	Arg	His	Gly	Arg
				125					130					135
Leu	Ser	Pro	Arg	Ser	Ala	Arg	Ala	Arg	Val	Thr	Val	Glu	Trp	Leu
				140					145					150
Arg	Val	Arg	Asp	Asp	Gly	Ser	Asn	Arg	Thr	Ser	Leu	Ile	Asp	Ser
				155					160					165
Arg	Leu	Val	Ser	Val	His	Glu	Ser	Gly	Trp	Lys	Ala	Phe	Asp	Val
				170					175					180
Thr	Glu	Ala	Val	Asn	Phe	Trp	Gln	Gln	Leu	Ser	Arg	Pro	Arg	Gln
				185					190					195
Pro	Leu	Leu	Leu	Gln	Val	Ser	Val	Gln	Arg	Glu	His	Leu	Gly	Pro
				200					205					210
Leu	Ala	Ser	Gly	Ala	His	Lys	Leu	Val	Arg	Phe	Ala	Ser	Gln	Gly
				215					220					225
Ala	Pro	Ala	Gly	Leu	Gly	Glu	Pro	Gln	Leu	Glu	Leu	His	Thr	Leu
				230					235					240
Asp	Leu	Gly	Asp	Tyr	Gly	Ala	Gln	Gly	Asp	Cys	Asp	Pro	Glu	Ala
				245					250					255
Pro	Met	Thr	Glu	Gly	Thr	Arg	Cys	Cys	Arg	Gln	Glu	Met	Tyr	Ile
				260					265					270
Asp	Leu	Gln	Gly	Met	Lys	Trp	Ala	Glu	Asn	Trp	Val	Leu	Glu	Pro
				275					280					285
Pro	Gly	Phe	Leu	Ala	Tyr	Glu	Cys	Val	Gly	Thr	Cys	Arg	Gln	Pro
				290					295					300
Pro	Glu	Ala	Leu	Ala	Phe	Lys	Trp	Pro	Phe	Leu	Gly	Pro	Arg	Gln
				305					310					315
Cys	Ile	Ala	Ser	Glu	Thr	Asp	Ser	Leu	Pro	Met	Ile	Val	Ser	Ile
				320					325					330
Lys	Glu	Gly	Gly	Arg	Thr	Arg	Pro	Gln	Val	Val	Ser	Leu	Pro	Asn
				335					340					345
Met	Arg	Val	Gln	Lys	Cys	Ser	Cys	Ala	Ser	Asp	Gly	Ala	Leu	Val
				350					355					360
Pro	Arg	Arg	Leu	Gln	Pro									
				365										

<210> 115

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 115

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<210> 116

P1618P2C3 sequence listing.txt

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<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 116
ataggagttg aagcagcgct gc 22

<210> 117
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 117
tgtgtggaca tagacgagtg ccgctaccgc tactgccagc accgc 45

<210> 118
<211> 1857
<212> DNA
<213> Homo Sapien

<400> 118
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gatggggaca aaggcgcaag tcgagaggaa actgttgtgc ctcttcatat 100
tggcgatcct gttgtgctcc ctggcattgg gcagtgttac agtgcactct 150
tctgaacctg aagtcagaat tcctgagaat aatcctgtga agttgtcctg 200
tgcctactcg ggcttttctt ctccccgtgt ggagtggaag tttgaccaag 250
gagacaccac cagactcggt tgctataata acaagatcac agcttcctat 300
gaggaccggg tgaccttctt gccaaactgg atcaccttca agtccgtgac 350
acgggaagac actgggacat acacttgtat ggtctctgag gaaggcggca 400
acagctatgg ggagggtcaag gtcaagctca tcgtgcttgt gcctccatcc 450
aagcctacag ttaacatccc ctctctgcc accattggga accgggcagt 500
gctgacatgc tcagaacaag atgggtcccc accttctgaa tacacctggt 550
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cggaatgtgg ggggtcatcgt ggcagccgtc cttgtaacct tgattctcct 800
gggaatcttg gtttttggca tctggtttgc ctatagccga ggccactttg 850
acagaacaaa gaaagggact tcgagtaaga aggtgattta cagccagcct 900

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P1618P2C3 sequence listing.txt

agtgcgccgaa gtgaaggaga attcaaacag acctcgatcat tcctggtgtg 950  
 agcctggtcg gctcaccgcc tatcatctgc atttgcctta ctcaggtgct 1000  
 accggactct ggcccctgat gtctgtagtt tcacaggatg ccttatttgt 1050  
 cttctacacc ccacagggcc ccctacttct tcggatgtgt ttttaataat 1100  
 gtcagctatg tgcccatcc tccttcatgc cctccctccc tttcctacca 1150  
 ctgctgagtg gcctggaact tgtttaaagt gtttattccc catttctttg 1200  
 agggatcagg aaggaatcct gggtagtcca ttgacttccc ttctaagtag 1250  
 acagcaaaaa tggcgggggt cgcaggaatc tgcactcaac tgcccacctg 1300  
 gctggcaggg atctttgaat aggtatcttg agcttggttc tgggctcttt 1350  
 ccttgtgtac tgacgaccag ggccagctgt tctagagcgg gaattagagg 1400  
 ctagagcggc tgaaatggtt gtttggtgat gacactgggg tccttccatc 1450  
 tctggggccc actctcttct gtcttcccat gggaagtgcc actgggatcc 1500  
 ctctgccctg tcctcctgaa tacaagctga ctgacattga ctgtgtctgt 1550  
 ggaaaatggg agctcttggt gtggagagca tagtaaattt tcagagaact 1600  
 tgaagccaaa aggatttaaa accgctgctc taaagaaaag aaaactggag 1650  
 gctgggcgca gtggctcacg cctgtaatcc cagaggctga ggcaggcgga 1700  
 tcacctgagg tcgggagttc gggatcagcc tgaccaacat ggagaaaccc 1750  
 tactggaaat acaaagttag ccaggcatgg tggtgcatgc ctgtagtccc 1800  
 agctgctcag gagcctggca acaagagcaa aactccagct caaaaaaaaaa 1850  
 aaaaaaa 1857

<210> 119  
 <211> 299  
 <212> PRT  
 <213> Homo Sapien

<400> 119  
 Met Gly Thr Lys Ala Gln Val Glu Arg Lys Leu Leu Cys Leu Phe  
 1 5 10 15  
 Ile Leu Ala Ile Leu Leu Cys Ser Leu Ala Leu Gly Ser Val Thr  
 20 25 30  
 Val His Ser Ser Glu Pro Glu Val Arg Ile Pro Glu Asn Asn Pro  
 35 40 45  
 Val Lys Leu Ser Cys Ala Tyr Ser Gly Phe Ser Ser Pro Arg Val  
 50 55 60  
 Glu Trp Lys Phe Asp Gln Gly Asp Thr Thr Arg Leu Val Cys Tyr  
 65 70 75  
 Asn Asn Lys Ile Thr Ala Ser Tyr Glu Asp Arg Val Thr Phe Leu  
 80 85 90

P1618P2C3 sequence listing.txt

Pro Thr Gly Ile Thr	Phe Lys Ser Val	Thr Arg Glu Asp Thr	Gly
95		100	105
Thr Tyr Thr Cys Met	Val Ser Glu Glu	Gly Gly Asn Ser Tyr	Gly
110		115	120
Glu Val Lys Val Lys	Leu Ile Val Leu	Val Pro Pro Ser Lys	Pro
125		130	135
Thr Val Asn Ile Pro	Ser Ser Ala Thr	Ile Gly Asn Arg Ala	Val
140		145	150
Leu Thr Cys Ser Glu	Gln Asp Gly Ser	Pro Pro Ser Glu Tyr	Thr
155		160	165
Trp Phe Lys Asp Gly	Ile Val Met Pro	Thr Asn Pro Lys Ser	Thr
170		175	180
Arg Ala Phe Ser Asn	Ser Ser Tyr Val	Leu Asn Pro Thr Thr	Gly
185		190	195
Glu Leu Val Phe Asp	Pro Leu Ser Ala	Ser Asp Thr Gly Glu	Tyr
200		205	210
Ser Cys Glu Ala Arg	Asn Gly Tyr Gly	Thr Pro Met Thr Ser	Asn
215		220	225
Ala Val Arg Met Glu	Ala Val Glu Arg	Asn Val Gly Val Ile	Val
230		235	240
Ala Ala Val Leu Val	Thr Leu Ile Leu	Leu Gly Ile Leu Val	Phe
245		250	255
Gly Ile Trp Phe Ala	Tyr Ser Arg Gly	His Phe Asp Arg Thr	Lys
260		265	270
Lys Gly Thr Ser Ser	Lys Lys Val Ile	Tyr Ser Gln Pro Ser	Ala
275		280	285
Arg Ser Glu Gly Glu	Phe Lys Gln Thr	Ser Ser Phe Leu Val	
290		295	

<210> 120

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 120

tcgcggagct gtgttctgtt tccc 24

<210> 121

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 121

P1618P2C3 sequence listing.txt

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<210> 122

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 122

acacctgggtt caaagatggg 20

<210> 123

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 123

taggaagagt tgctgaaggc acgg 24

<210> 124

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 124

ttgccttact caggtgctac 20

<210> 125

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 125

actcagcagt gtaggaaag 20

<210> 126

<211> 1210

<212> DNA

<213> Homo Sapien

<400> 126

cagcgcgtgg ccggcgccgc tgtggggaca gcatgagcgg cggttgatg 50

gcgcaggttg gagcgtggcg aacaggggct ctgggcctgg cgctgctgct 100

gctgctcggc ctcggactag gcctggaggc cgccgcgagc ccgctttcca 150

ccccgacctc tgcccaggcc gcaggcccca gctcaggctc gtgcccaccc 200

accaagttcc agtgccgcac cagtggctta tgcgtgcccc tcacctggcg 250

ctgcgacagg gacttggact gcagcgatgg cagcgatgag gaggagtgca 300

P1618P2C3 sequence listing.txt

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 actgcgcaac tgcagccgcc tggcctgcct agcaggcgag ctccgttgca 450  
 cgctgagcga tgactgcatt ccactcacgt ggcgctgcga cggccacca 500  
 gactgtcccg actccagcga cgagctcggc tgtggaacca atgagatcct 550  
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 tggagccca actgcctatg ggggtattgc agctgctgcg gtgctcagt 750  
 caagcctggc caccgccacc ctctctcttt tgcctggct ccgagcccag 800  
 gagcgcctcc gccactggg gttactggg gccatgaagg agtccttgc 850  
 gctgtcagaa cagaagacct cgctgccctg aggacaagca cttgccacca 900  
 ccgtcactca gccctgggcg tagccggaca ggaggagagc agtgatgcgg 950  
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 gtggaacctc gaacccgagc tcctgcagaa gtggccctgg agattgagg 1050  
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 cacagccaga actgaggggc tggccccagg cagctcccag ggggtagaac 1150  
 ggccctgtgc ttaagacact ccctgctgcc ccgtctgagg gtggcgatta 1200  
 aagttgcttc 1210

<210> 127  
 <211> 282  
 <212> PRT  
 <213> Homo Sapien

<400> 127  
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 Leu Glu Ala Ala Ala Ser Pro Leu Ser Thr Pro Thr Ser Ala Gln  
 35 40 45  
 Ala Ala Gly Pro Ser Ser Gly Ser Cys Pro Pro Thr Lys Phe Gln  
 50 55 60  
 Cys Arg Thr Ser Gly Leu Cys Val Pro Leu Thr Trp Arg Cys Asp  
 65 70 75  
 Arg Asp Leu Asp Cys Ser Asp Gly Ser Asp Glu Glu Glu Cys Arg  
 80 85 90

P1618P2C3 sequence listing.txt

Ile	Glu	Pro	Cys	Thr	Gln	Lys	Gly	Gln	Cys	Pro	Pro	Pro	Pro	Gly	95	100	105
Leu	Pro	Cys	Pro	Cys	Thr	Gly	Val	Ser	Asp	Cys	Ser	Gly	Gly	Thr	110	115	120
Asp	Lys	Lys	Leu	Arg	Asn	Cys	Ser	Arg	Leu	Ala	Cys	Leu	Ala	Gly	125	130	135
Glu	Leu	Arg	Cys	Thr	Leu	Ser	Asp	Asp	Cys	Ile	Pro	Leu	Thr	Trp	140	145	150
Arg	Cys	Asp	Gly	His	Pro	Asp	Cys	Pro	Asp	Ser	Ser	Asp	Glu	Leu	155	160	165
Gly	Cys	Gly	Thr	Asn	Glu	Ile	Leu	Pro	Glu	Gly	Asp	Ala	Thr	Thr	170	175	180
Met	Gly	Pro	Pro	Val	Thr	Leu	Glu	Ser	Val	Thr	Ser	Leu	Arg	Asn	185	190	195
Ala	Thr	Thr	Met	Gly	Pro	Pro	Val	Thr	Leu	Glu	Ser	Val	Pro	Ser	200	205	210
Val	Gly	Asn	Ala	Thr	Ser	Ser	Ser	Ala	Gly	Asp	Gln	Ser	Gly	Ser	215	220	225
Pro	Thr	Ala	Tyr	Gly	Val	Ile	Ala	Ala	Ala	Ala	Val	Leu	Ser	Ala	230	235	240
Ser	Leu	Val	Thr	Ala	Thr	Leu	Leu	Leu	Leu	Ser	Trp	Leu	Arg	Ala	245	250	255
Gln	Glu	Arg	Leu	Arg	Pro	Leu	Gly	Leu	Leu	Val	Ala	Met	Lys	Glu	260	265	270
Ser	Leu	Leu	Leu	Ser	Glu	Gln	Lys	Thr	Ser	Leu	Pro				275	280	

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<400> 128  
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<210> 129  
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<210> 130  
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P1618P2C3 sequence listing.txt

<212> DNA

<213> Artificial Sequence

<220>

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<211> 1843

<212> DNA

<213> Homo Sapien

<220>

<221> unsure

<222> 1837

<223> unknown base

<400> 131

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cctcaccagc gactacaagt acatcacctg ccagtatgga gagtggtttc 1050
cttcttatca agtctactgc atcaaatac agcaaactg gccacgacc 1100

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P1618P2C3 sequence listing.txt

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 gaccctgact ttgtggtggt agacggcgtg cccgtcatgc tcccgtccta 1300  
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 gtttcttctt gacacagact gattaataat taaaagnaaa aaa 1843

<210> 132

<211> 490

<212> PRT

<213> Homo Sapien

<400> 132

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				20					25					30
Ala	Val	Ile	Leu	Trp	Phe	Gln	Leu	Ala	Leu	Cys	Phe	Gly	Pro	Ala
				35					40					45
Gln	Leu	Thr	Gly	Gly	Phe	Asp	Asp	Leu	Gln	Val	Cys	Ala	Asp	Pro
				50					55					60
Gly	Ile	Pro	Glu	Asn	Gly	Phe	Arg	Thr	Pro	Ser	Gly	Gly	Val	Phe
				65					70					75
Phe	Glu	Gly	Ser	Val	Ala	Arg	Phe	His	Cys	Gln	Asp	Gly	Phe	Lys
				80					85					90
Leu	Lys	Gly	Ala	Thr	Lys	Arg	Leu	Cys	Leu	Lys	His	Phe	Asn	Gly
				95					100					105
Thr	Leu	Gly	Trp	Ile	Pro	Ser	Asp	Asn	Ser	Ile	Cys	Val	Gln	Glu
				110					115					120
Asp	Cys	Arg	Ile	Pro	Gln	Ile	Glu	Asp	Ala	Glu	Ile	His	Asn	Lys
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P1618P2C3 sequence listing.txt

Thr Tyr Arg His	Gly 140	Glu Lys Leu Ile	Ile 145	Thr Cys His Glu	Gly 150
Phe Lys Ile Arg	Tyr 155	Pro Asp Leu His	Asn 160	Met Val Ser Leu	Cys 165
Arg Asp Asp Gly	Thr 170	Trp Asn Asn Leu	Pro 175	Ile Cys Gln Gly	Cys 180
Leu Arg Pro Leu	Ala 185	Ser Ser Asn Gly	Tyr 190	Val Asn Ile Ser	Glu 195
Leu Gln Thr Ser	Phe 200	Pro Val Gly Thr	Val 205	Ile Ser Tyr Arg	Cys 210
Phe Pro Gly Phe	Lys 215	Leu Asp Gly Ser	Ala 220	Tyr Leu Glu Cys	Leu 225
Gln Asn Leu Ile	Trp 230	Ser Ser Ser Pro	Pro 235	Arg Cys Leu Ala	Leu 240
Glu Ala Gln Val	Cys 245	Pro Leu Pro Pro	Met 250	Val Ser His Gly	Asp 255
Phe Val Cys His	Pro 260	Arg Pro Cys Glu	Arg 265	Tyr Asn His Gly	Thr 270
Val Val Glu Phe	Tyr 275	Cys Asp Pro Gly	Tyr 280	Ser Leu Thr Ser	Asp 285
Tyr Lys Tyr Ile	Thr 290	Cys Gln Tyr Gly	Glu 295	Trp Phe Pro Ser	Tyr 300
Gln Val Tyr Cys	Ile 305	Lys Ser Glu Gln	Thr 310	Trp Pro Ser Thr	His 315
Glu Thr Leu Leu	Thr 320	Thr Trp Lys Ile	Val 325	Ala Phe Thr Ala	Thr 330
Ser Val Leu Leu	Val 335	Leu Leu Leu Val	Ile 340	Leu Ala Arg Met	Phe 345
Gln Thr Lys Phe	Lys 350	Ala His Phe Pro	Pro 355	Arg Gly Pro Pro	Arg 360
Ser Ser Ser Ser	Asp 365	Pro Asp Phe Val	Val 370	Val Asp Gly Val	Pro 375
Val Met Leu Pro	Ser 380	Tyr Asp Glu Ala	Val 385	Ser Gly Gly Leu	Ser 390
Ala Leu Gly Pro	Gly 395	Tyr Met Ala Ser	Val 400	Gly Gln Gly Cys	Pro 405
Leu Pro Val Asp	Asp 410	Gln Ser Pro Pro	Ala 415	Tyr Pro Gly Ser	Gly 420
Asp Thr Asp Thr	Gly 425	Pro Gly Glu Ser	Glu 430	Thr Cys Asp Ser	Val 435
Ser Gly Ser Ser	Glu 440	Leu Leu Gln Ser	Leu 445	Tyr Ser Pro Pro	Arg 450

P1618P2C3 sequence listing.txt

Cys	Gln	Glu	Ser	Thr	His	Pro	Ala	Ser	Asp	Asn	Pro	Asp	Ile	Ile
				455					460				465	
Ala	Ser	Thr	Ala	Glu	Glu	Val	Ala	Ser	Thr	Ser	Pro	Gly	Ile	His
				470					475				480	
His	Ala	His	Trp	Val	Leu	Phe	Leu	Arg	Asn					
				485					490					

<210> 133  
 <211> 23  
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<220>  
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<400> 133  
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<210> 134  
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 <213> Artificial sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 134  
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<210> 135  
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 <212> DNA  
 <213> Homo sapien

<400> 136  
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 cccgccagcc cgctccaccg ccgtagcgcc cgagtgtcgg ggggcgcacc 150  
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 ggatttggac ctgagaggag ggcagccagt ctgccgggga gggacacaga 300  
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P1618P2C3 sequence listing.txt

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tggttattag gacatataaa aaactgaaac tgacaacaat ggaaaagaaa 1350
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 <212> PRT

P1618P2C3 sequence listing.txt

<213> Homo Sapien

<400> 137

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Asp	Leu	Asp	Leu	Arg	Gly	Gly	Gln	Pro	Val	Cys	Arg	Gly	Gly	Thr	35	40	45	
Gln	Arg	Pro	Cys	Tyr	Lys	Val	Ile	Tyr	Phe	His	Asp	Thr	Ser	Arg	50	55	60	
Arg	Leu	Asn	Phe	Glu	Glu	Ala	Lys	Glu	Ala	Cys	Arg	Arg	Asp	Gly	65	70	75	
Gly	Gln	Leu	Val	Ser	Ile	Glu	Ser	Glu	Asp	Glu	Gln	Lys	Leu	Ile	80	85	90	
Glu	Lys	Phe	Ile	Glu	Asn	Leu	Leu	Pro	Ser	Asp	Gly	Asp	Phe	Trp	95	100	105	
Ile	Gly	Leu	Arg	Arg	Arg	Glu	Glu	Lys	Gln	Ser	Asn	Ser	Thr	Ala	110	115	120	
Cys	Gln	Asp	Leu	Tyr	Ala	Trp	Thr	Asp	Gly	Ser	Ile	Ser	Gln	Phe	125	130	135	
Arg	Asn	Trp	Tyr	Val	Asp	Glu	Pro	Ser	Cys	Gly	Ser	Glu	Val	Cys	140	145	150	
Val	Val	Met	Tyr	His	Gln	Pro	Ser	Ala	Pro	Ala	Gly	Ile	Gly	Gly	155	160	165	
Pro	Tyr	Met	Phe	Gln	Trp	Asn	Asp	Asp	Arg	Cys	Asn	Met	Lys	Asn	170	175	180	
Asn	Phe	Ile	Cys	Lys	Tyr	Ser	Asp	Glu	Lys	Pro	Ala	Val	Pro	Ser	185	190	195	
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Pro	Glu	Glu	Thr	Gln	Glu	Glu	Asp	Ala	Lys	Lys	Thr	Phe	Lys	Glu	215	220	225	
Ser	Arg	Glu	Ala	Ala	Leu	Asn	Leu	Ala	Tyr	Ile	Leu	Ile	Pro	Ser	230	235	240	
Ile	Pro	Leu	Leu	Leu	Leu	Leu	Val	Val	Thr	Thr	Val	Val	Cys	Trp	245	250	255	
Val	Trp	Ile	Cys	Arg	Lys	Arg	Lys	Arg	Glu	Gln	Pro	Asp	Pro	Ser	260	265	270	
Thr	Lys	Lys	Gln	His	Thr	Ile	Trp	Pro	Ser	Pro	His	Gln	Gly	Asn	275	280	285	
Ser	Pro	Asp	Leu	Glu	Val	Tyr	Asn	Val	Ile	Arg	Lys	Gln	Ser	Glu	290	295	300	

P1618P2C3 sequence listing.txt

Ala	Asp	Leu	Ala	Glu	Thr	Arg	Pro	Asp	Leu	Lys	Asn	Ile	Ser	Phe
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Arg	Val	Cys	Ser	Gly	Glu	Ala	Thr	Pro	Asp	Asp	Met	Ser	Cys	Asp
				320					325					330
Tyr	Asp	Asn	Met	Ala	Val	Asn	Pro	Ser	Glu	Ser	Gly	Phe	Val	Thr
				335					340					345
Leu	Val	Ser	Val	Glu	Ser	Gly	Phe	Val	Thr	Asn	Asp	Ile	Tyr	Glu
				350					355					360
Phe	Ser	Pro	Asp	Gln	Met	Gly	Arg	Ser	Lys	Glu	Ser	Gly	Trp	Val
				365					370					375
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<210> 138

<211> 50

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<213> Artificial Sequence

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<223> Synthetic Oligonucleotide Probe

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<210> 139

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<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 139

aagccaaaga agcctgcagg aggg 24

<210> 140

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 140

cagtccaagc ataaagggtcc tggc 24

<210> 141

<211> 1514

<212> DNA

<213> Homo Sapien

<400> 141

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ccccggcgcc cgcagaagac ttgtgtttgc ctctgcagc ctcaaccgg 150

P1618P2C3 sequence listing.txt

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 aaaaatacca tgcactctgc tctcaaactc aggtgatgga agttggaaat 1450  
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<210> 142  
 <211> 428  
 <212> PRT  
 <213> Homo Sapien

<400> 142  
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 Page 87

P1618P2C3 sequence listing.txt

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35	40	45	
Ser Leu Leu Lys Leu	Lys Met Val Gln Val	Val Phe Arg His	Gly
50	55	60	
Ala Arg Ser Pro Leu	Lys Pro Leu Pro Leu	Glu Glu Gln Val	Glu
65	70	75	
Trp Asn Pro Gln Leu	Leu Glu Val Pro Pro	Gln Thr Gln Phe	Asp
80	85	90	
Tyr Thr Val Thr Asn	Leu Ala Gly Gly Pro	Lys Pro Tyr Ser	Pro
95	100	105	
Tyr Asp Ser Gln Tyr	His Glu Thr Thr Leu	Lys Gly Gly Met	Phe
110	115	120	
Ala Gly Gln Leu Thr	Lys Val Gly Met Gln	Gln Met Phe Ala	Leu
125	130	135	
Gly Glu Arg Leu Arg	Lys Asn Tyr Val Glu	Asp Ile Pro Phe	Leu
140	145	150	
Ser Pro Thr Phe Asn	Pro Gln Glu Val Phe	Ile Arg Ser Thr	Asn
155	160	165	
Ile Phe Arg Asn Leu	Glu Ser Thr Arg Cys	Leu Leu Ala Gly	Leu
170	175	180	
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185	190	195	
Ala Asp Ser Glu Val	Leu Tyr Pro Asn Tyr	Gln Ser Cys Trp	Ser
200	205	210	
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215	220	225	
Pro Gly Ile Ser Glu	Asp Leu Lys Lys Val	Lys Asp Arg Met	Gly
230	235	240	
Ile Asp Ser Ser Asp	Lys Val Asp Phe Phe	Ile Leu Leu Asp	Asn
245	250	255	
Val Ala Ala Glu Gln	Ala His Asn Leu Pro	Ser Cys Pro Met	Leu
260	265	270	
Lys Arg Phe Ala Arg	Met Ile Glu Gln Arg	Ala Val Asp Thr	Ser
275	280	285	
Leu Tyr Ile Leu Pro	Lys Glu Asp Arg Glu	Ser Leu Gln Met	Ala
290	295	300	
Val Gly Pro Phe Leu	His Ile Leu Glu Ser	Asn Leu Leu Lys	Ala
305	310	315	
Met Asp Ser Ala Thr	Ala Pro Asp Lys Ile	Arg Lys Leu Tyr	Leu



P1618P2C3 sequence listing.txt

320 325 330

Tyr Ala Ala His Asp Val Thr Phe Ile Pro Leu Leu Met Thr Leu  
335 340 345

Gly Ile Phe Asp His Lys Trp Pro Pro Phe Ala Val Asp Leu Thr  
350 355 360

Met Glu Leu Tyr Gln His Leu Glu Ser Lys Glu Trp Phe Val Gln  
365 370 375

Leu Tyr Tyr His Gly Lys Glu Gln Val Pro Arg Gly Cys Pro Asp  
380 385 390

Gly Leu Cys Pro Leu Asp Met Phe Leu Asn Ala Met Ser Val Tyr  
395 400 405

Thr Leu Ser Pro Glu Lys Tyr His Ala Leu Cys Ser Gln Thr Gln  
410 415 420

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<210> 143

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 143

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<210> 144

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 144

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<210> 145

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Synthetic Oligonucleotide Probe

<400> 145

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<211> 45

<212> DNA

<213> Artificial Sequence

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P1618P2C3 sequence listing.txt

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agcgtctcca tctggagtgc ggctgggtggg gggcctccac cgctgtgaag 200
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acattggctc agtgtgagca agaagaagtt tatgattgtt cacatgatga 450
agatgctggg gcatcggtg agaaccaga gagctctttc tccccagtcc 500
cagaggggtgt caggctggct gacggccctg ggcatgcaa gggacgcgtg 550
gaagtgaagc accagaacca gtggtatacc gtgtgccaga caggctggag 600
cctccggggc gcaaagggtg tgtgccggca gctgggatgt gggagggctg 650
tactgactca aaaacgctgc aacaagcatg cctatggccg aaaaccatc 700
tggctgagcc agatgtcatg ctcaggacga gaagcaaccc ttcaggattg 750
cccttctggg ccttggggga agaacacctg caaccatgat gaagacacgt 800
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ctctgctctg ggcgactgga ggtgctgcac aagggcgat ggggctctgt 900
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tgggctgtgg gaagtccctc tctccctcct tcagagaccg gaaatgctat 1000
ggccctgggg ttggccgcat ctggctggat aatgttcgtt gctcagggga 1050
ggagcagtcc ctggagcagt gccagcacag attttggggg tttcacgact 1100
gcaccacca ggaagatgtg gctgtcatct gctcagtgtg ggtgggcatc 1150
atctaactct ttgagtgcct gaatagaaga aaaacacaga agaagggagc 1200
atttactgtc tacatgactg catgggatga aactgatct tcttctgccc 1250
ttggactggg acttatactt ggtgcccctg attctcaggc cttcagagtt 1300
ggatcagaac ttacaacatc aggtctagtt ctcaggccat cagacatagt 1350

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P1618P2C3 sequence listing.txt

ttggaactac atcaccacct ttcctatgtc tccacattgc acacagcaga 1400  
 ttcccagcct ccataattgt gtgtatcaac tacttaaata cattctcaca 1450  
 cacacacaca cacacacaca cacacacaca cacacataca ccatttgtcc 1500  
 tgtttctctg aagaactctg acaaaatata gattttggta ctgaaagaga 1550  
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 tttctgaaat tggctctata atctaattag atataaaatt ctggtaactt 1650  
 tattacaat aataaagata gcactatgtg ttcaaa 1686

<210> 148

<211> 347

<212> PRT

<213> Homo Sapien

<400> 148

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Gly	Phe	Leu	Ala	Ser	Pro	Ser	Gly	Val	Arg	Leu	Val	Gly	Gly	Leu
				20					25					30
His	Arg	Cys	Glu	Gly	Arg	Val	Glu	Val	Glu	Gln	Lys	Gly	Gln	Trp
				35					40					45
Gly	Thr	Val	Cys	Asp	Asp	Gly	Trp	Asp	Ile	Lys	Asp	Val	Ala	Val
				50					55					60
Leu	Cys	Arg	Glu	Leu	Gly	Cys	Gly	Ala	Ala	Ser	Gly	Thr	Pro	Ser
				65					70					75
Gly	Ile	Leu	Tyr	Glu	Pro	Pro	Ala	Glu	Lys	Glu	Gln	Lys	Val	Leu
				80					85					90
Ile	Gln	Ser	Val	Ser	Cys	Thr	Gly	Thr	Glu	Asp	Thr	Leu	Ala	Gln
				95					100					105
Cys	Glu	Gln	Glu	Glu	Val	Tyr	Asp	Cys	Ser	His	Asp	Glu	Asp	Ala
				110					115					120
Gly	Ala	Ser	Cys	Glu	Asn	Pro	Glu	Ser	Ser	Phe	Ser	Pro	Val	Pro
				125					130					135
Glu	Gly	Val	Arg	Leu	Ala	Asp	Gly	Pro	Gly	His	Cys	Lys	Gly	Arg
				140					145					150
Val	Glu	Val	Lys	His	Gln	Asn	Gln	Trp	Tyr	Thr	Val	Cys	Gln	Thr
				155					160					165
Gly	Trp	Ser	Leu	Arg	Ala	Ala	Lys	Val	Val	Cys	Arg	Gln	Leu	Gly
				170					175					180
Cys	Gly	Arg	Ala	Val	Leu	Thr	Gln	Lys	Arg	Cys	Asn	Lys	His	Ala
				185					190					195
Tyr	Gly	Arg	Lys	Pro	Ile	Trp	Leu	Ser	Gln	Met	Ser	Cys	Ser	Gly
				200					205					210

P1618P2C3 sequence listing.txt

Arg	Glu	Ala	Thr	Leu	Gln	Asp	Cys	Pro	Ser	Gly	Pro	Trp	Gly	Lys
				215					220					225
Asn	Thr	Cys	Asn	His	Asp	Glu	Asp	Thr	Trp	Val	Glu	Cys	Glu	Asp
				230					235					240
Pro	Phe	Asp	Leu	Arg	Leu	Val	Gly	Gly	Asp	Asn	Leu	Cys	Ser	Gly
				245					250					255
Arg	Leu	Glu	Val	Leu	His	Lys	Gly	Val	Trp	Gly	Ser	Val	Cys	Asp
				260					265					270
Asp	Asn	Trp	Gly	Glu	Lys	Glu	Asp	Gln	Val	Val	Cys	Lys	Gln	Leu
				275					280					285
Gly	Cys	Gly	Lys	Ser	Leu	Ser	Pro	Ser	Phe	Arg	Asp	Arg	Lys	Cys
				290					295					300
Tyr	Gly	Pro	Gly	Val	Gly	Arg	Ile	Trp	Leu	Asp	Asn	Val	Arg	Cys
				305					310					315
Ser	Gly	Glu	Glu	Gln	Ser	Leu	Glu	Gln	Cys	Gln	His	Arg	Phe	Trp
				320					325					330
Gly	Phe	His	Asp	Cys	Thr	His	Gln	Glu	Asp	Val	Ala	Val	Ile	Cys
				335					340					345

Ser Val

<210> 149  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 149  
 ttcagctcat caccttcacc tgcc 24

<210> 150  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 150  
 ggctcataca aaataccact aggg 24

<210> 151  
 <211> 50  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 151  
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P1618P2C3 sequence listing.txt

<210> 152  
 <211> 1427  
 <212> DNA  
 <213> Homo Sapien

<400> 152  
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 ctcgacctcg acccacgcgt ccgcggacgc gtgggcggac gcgtgggccg 100  
 gctaccagga agagtctgcc gaaggatgaag gccatggact tcatcacctc 150  
 cacagccatc ctgcccctgc tgttcggctg cctgggcgtc ttcggcctct 200  
 tccggctgct gcagtgggtg cgcgggaagg cctacctgct gaatgctgtg 250  
 gtggtgatca caggcgccac ctcagggtg ggcaaagaat gtgcaaaagt 300  
 cttctatgct gcgggtgcta aactgggtg ctgtggccgg aatgggtggg 350  
 ccctagaaga gctcatcaga gaacttaccg cttctcatgc caccaagggtg 400  
 cagacacaca agccttactt ggtgacctc gacctcacag actctggggc 450  
 catagttgca gcagcagctg agatcctgca gtgctttggc tatgtcgaca 500  
 tacttgtaaa caatgctggg atcagctacc gtggtacat catggacacc 550  
 acagtggatg tggacaagag ggtcatggag acaaactact ttggcccagt 600  
 tgctctaacg aaagcactcc tgccctccat gatcaagagg aggcaaggcc 650  
 acattgtcgc catcagcagc atccagggca agatgagcat tccttttcga 700  
 tcagcatatg cagcctccaa gcacgcaacc caggctttct ttgactgtct 750  
 gcgtgcccag atggaacagt atgaaattga ggtgaccgtc atcagccccg 800  
 gctacatcca caccaacctc tctgtaaattg ccatcaccgc ggatggatct 850  
 aggtatggag ttatggacac caccacagcc cagggccgaa gccctgtgga 900  
 ggtggcccag gatgttcttg ctgctgtggg gaagaagaag aaagatgtga 950  
 tcctggctga cttactgcct tccttggtg tttatcttcg aactctggct 1000  
 cctgggctct tcttcagcct catggcctcc agggccagaa aagagcggaa 1050  
 atccaagaac tcctagtact ctgaccagcc agggccaggg cagagaagca 1100  
 gcactcttag gcttgcttac tctacaaggg acagttgcat ttgttgagac 1150  
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 gtgcagatct gctggcagag gacaatcaaa aacgacaaca agcttcttcc 1250  
 cagggtgagg ggaaacactt aaggaataaa tatggagctg gggtttaaca 1300  
 ctaaaaacta gaaataaaca tctcaaacag taaaaaaaaa aaaaaagggc 1350  
 ggccgcgact ctagagtcga cctgcagaag cttggccgcc atggcccaac 1400  
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P1618P2C3 sequence listing.txt

<210> 153  
 <211> 310  
 <212> PRT  
 <213> Homo Sapien

<400> 153  
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 Gly Lys Ala Tyr Leu Arg Asn Ala Val Val Val Ile Thr Gly Ala  
 35 40 45  
 Thr Ser Gly Leu Gly Lys Glu Cys Ala Lys Val Phe Tyr Ala Ala  
 50 55 60  
 Gly Ala Lys Leu Val Leu Cys Gly Arg Asn Gly Gly Ala Leu Glu  
 65 70 75  
 Glu Leu Ile Arg Glu Leu Thr Ala Ser His Ala Thr Lys Val Gln  
 80 85 90  
 Thr His Lys Pro Tyr Leu Val Thr Phe Asp Leu Thr Asp Ser Gly  
 95 100 105  
 Ala Ile Val Ala Ala Ala Ala Glu Ile Leu Gln Cys Phe Gly Tyr  
 110 115 120  
 Val Asp Ile Leu Val Asn Asn Ala Gly Ile Ser Tyr Arg Gly Thr  
 125 130 135  
 Ile Met Asp Thr Thr Val Asp Val Asp Lys Arg Val Met Glu Thr  
 140 145 150  
 Asn Tyr Phe Gly Pro Val Ala Leu Thr Lys Ala Leu Leu Pro Ser  
 155 160 165  
 Met Ile Lys Arg Arg Gln Gly His Ile Val Ala Ile Ser Ser Ile  
 170 175 180  
 Gln Gly Lys Met Ser Ile Pro Phe Arg Ser Ala Tyr Ala Ala Ser  
 185 190 195  
 Lys His Ala Thr Gln Ala Phe Phe Asp Cys Leu Arg Ala Glu Met  
 200 205 210  
 Glu Gln Tyr Glu Ile Glu Val Thr Val Ile Ser Pro Gly Tyr Ile  
 215 220 225  
 His Thr Asn Leu Ser Val Asn Ala Ile Thr Ala Asp Gly Ser Arg  
 230 235 240  
 Tyr Gly Val Met Asp Thr Thr Thr Ala Gln Gly Arg Ser Pro Val  
 245 250 255  
 Glu Val Ala Gln Asp Val Leu Ala Ala Val Gly Lys Lys Lys Lys  
 260 265 270  
 Asp Val Ile Leu Ala Asp Leu Leu Pro Ser Leu Ala Val Tyr Leu  
 275 280 285

P1618P2C3 sequence listing.txt

Arg Thr Leu Ala Pro Gly Leu Phe Phe Ser Leu Met Ala Ser Arg  
290 295 300

Ala Arg Lys Glu Arg Lys Ser Lys Asn Ser  
305 310

<210> 154  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 154  
ggtgctaaac tggtgctctg tggc 24

<210> 155  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 155  
cagggaaga tgagcattcc 20

<210> 156  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 156  
tcatactggt ccactcggc acgc 24

<210> 157  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 157  
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<210> 158  
<211> 1771  
<212> DNA  
<213> Homo Sapien

<400> 158  
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agtggtaaaa aaaaaaaaaa acacaccaaa cgctcgagc cacaaaagg 100  
atgaaatttc ttctggacat cctcctgctt ctcccgttac tgatcgtctg 150

P1618P2C3 sequence listing.txt

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tataaataag catggactgg aggaaacagc tgccaaatgc aagggactgg 350
gtgccaaggt tcataccttt gtggtagact gcagcaaccg agaagatatt 400
tacagctctg caaagaaggt gaaggcagaa attggagatg ttagtatttt 450
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tgtcactgtg gcttcggcag ctggacatgt ctcggtcccc ttcttactgg 650
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tctaatagtg ccagaatttt aatgtttgaa cttctgtttt ttctaattat 1100
ccccatttct tcaatatcat ttttgaggct ttggcagtct tcatttacta 1150
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gccactctgt ttcctgagag atacctcaca ttccaatgcc aaacatttct 1550
gcacagggaa gctagagggt gatacacgtg ttgcaagtat aaaagcatca 1600
ctgggattta aggagaattg agagaatgta cccacaaatg gcagcaataa 1650
taaatggatc acacttaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1700
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1750
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P1618P2C3 sequence listing.txt

aaaaaaaaa aaaaaaaaaa a 1771

<210> 159

<211> 300

<212> PRT

<213> Homo sapien

<400> 159

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 20      25      30
Arg  Lys  Ser  Val  Thr  Gly  Glu  Ile  Val  Leu  Ile  Thr  Gly  Ala  Gly
 35      40      45
His  Gly  Ile  Gly  Arg  Leu  Thr  Ala  Tyr  Glu  Phe  Ala  Lys  Leu  Lys
 50      55      60
Ser  Lys  Leu  Val  Leu  Trp  Asp  Ile  Asn  Lys  His  Gly  Leu  Glu  Glu
 65      70      75
Thr  Ala  Ala  Lys  Cys  Lys  Gly  Leu  Gly  Ala  Lys  Val  His  Thr  Phe
 80      85      90
Val  Val  Asp  Cys  Ser  Asn  Arg  Glu  Asp  Ile  Tyr  Ser  Ser  Ala  Lys
 95     100     105
Lys  Val  Lys  Ala  Glu  Ile  Gly  Asp  Val  Ser  Ile  Leu  Val  Asn  Asn
110     115     120
Ala  Gly  Val  Val  Tyr  Thr  Ser  Asp  Leu  Phe  Ala  Thr  Gln  Asp  Pro
125     130     135
Gln  Ile  Glu  Lys  Thr  Phe  Glu  Val  Asn  Val  Leu  Ala  His  Phe  Trp
140     145     150
Thr  Thr  Lys  Ala  Phe  Leu  Pro  Ala  Met  Thr  Lys  Asn  Asn  His  Gly
155     160     165
His  Ile  Val  Thr  Val  Ala  Ser  Ala  Ala  Gly  His  Val  Ser  Val  Pro
170     175     180
Phe  Leu  Leu  Ala  Tyr  Cys  Ser  Ser  Lys  Phe  Ala  Ala  Val  Gly  Phe
185     190     195
His  Lys  Thr  Leu  Thr  Asp  Glu  Leu  Ala  Ala  Leu  Gln  Ile  Thr  Gly
200     205     210
Val  Lys  Thr  Thr  Cys  Leu  Cys  Pro  Asn  Phe  Val  Asn  Thr  Gly  Phe
215     220     225
Ile  Lys  Asn  Pro  Ser  Thr  Ser  Leu  Gly  Pro  Thr  Leu  Glu  Pro  Glu
230     235     240
Glu  Val  Val  Asn  Arg  Leu  Met  His  Gly  Ile  Leu  Thr  Glu  Gln  Lys
245     250     255
Met  Ile  Phe  Ile  Pro  Ser  Ser  Ile  Ala  Phe  Leu  Thr  Thr  Leu  Glu
260     265     270

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P1618P2C3 sequence listing.txt  
 Arg Ile Leu Pro Glu Arg Phe Leu Ala Val Leu Lys Arg Lys Ile  
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Ser Val Lys Phe Asp Ala Val Ile Gly Tyr Lys Met Lys Ala Gln  
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<210> 160  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 160  
 ggtgaaggca gaaattggag atg 23

<210> 161  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 161  
 atcccatgca tcagcctggt tacc 24

<210> 162  
 <211> 48  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 162  
 gctggtgtag tctatacatc agatttggtt gctacacaag atcctcag 48

<210> 163  
 <211> 2076  
 <212> DNA  
 <213> Homo Sapien

<400> 163  
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 ttggtgccat gtggaaggtg attgtttcgc tggtcctggt gatgcctggc 150  
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 ctgaacatga agagttatgc cggcttcctc accgtgaata agacttaca 350  
 cagcaacctc ttcttctggt tcttcccagc tcagatacag ccagaagatg 400  
 cccagtagt tctctggcta cagggtgggc cgggagggtc atccatgttt 450

P1618P2C3 sequence listing.txt

ggactctttg tggaacatgg gccttatgtt gtcacaagta acatgacctt 500  
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acaatccagt gggcacaggc ttcagtttta ctgatgatac ccacggatat 600  
gcagtcaatg aggacgatgt agcacgggat ttatacagtg cactaattca 650  
gtttttccag atatttcctg aatataaaaa taatgacttt tatgtcactg 700  
gggagtctta tgcagggaaa tatgtgccag ccattgcaca cctcatccat 750  
tccctcaacc ctgtgagaga ggtgaagatc aacctgaacg gaattgctat 800  
tggagatgga tattctgatc ccgaatcaat tatagggggc tatgcagaat 850  
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gaactatagt tgaaaagtac ttgcgagaag atacagtaca gtcagttaag 1200  
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cagaggtttt cattgctgaa aagaaaatcg taaaacaga aaatgtcata 1600  
ggaataaaaa aattatcttt tcatatctgc aagatttttt tcatcaataa 1650  
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agtgcagttg taacaaacaa agctgtaaca tctttttctg ccaataacag 1900  
aagtttggca tgccgtgaag gtgtttggaa atattattgg ataagaatag 1950  
ctcaattatc ccaataaaat ggatgaagct ataatagttt tggggaaaag 2000  
attctcaaat gtataaagtc ttagaacaaa agaattcttt gaaataaaaa 2050

P1618P2C3 sequence listing.txt

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<210> 164  
<211> 476  
<212> PRT  
<213> Homo sapien

<400> 164  
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20 25 30  
Val Ser Met Pro Pro Lys Gly Asp Ser Gly Gln Pro Leu Phe Leu  
35 40 45  
Thr Pro Tyr Ile Glu Ala Gly Lys Ile Gln Lys Gly Arg Glu Leu  
50 55 60  
Ser Leu Val Gly Pro Phe Pro Gly Leu Asn Met Lys Ser Tyr Ala  
65 70 75  
Gly Phe Leu Thr Val Asn Lys Thr Tyr Asn Ser Asn Leu Phe Phe  
80 85 90  
Trp Phe Phe Pro Ala Gln Ile Gln Pro Glu Asp Ala Pro Val Val  
95 100 105  
Leu Trp Leu Gln Gly Gly Pro Gly Gly Ser Ser Met Phe Gly Leu  
110 115 120  
Phe Val Glu His Gly Pro Tyr Val Val Thr Ser Asn Met Thr Leu  
125 130 135  
Arg Asp Arg Asp Phe Pro Trp Thr Thr Thr Leu Ser Met Leu Tyr  
140 145 150  
Ile Asp Asn Pro Val Gly Thr Gly Phe Ser Phe Thr Asp Asp Thr  
155 160 165  
His Gly Tyr Ala Val Asn Glu Asp Asp Val Ala Arg Asp Leu Tyr  
170 175 180  
Ser Ala Leu Ile Gln Phe Phe Gln Ile Phe Pro Glu Tyr Lys Asn  
185 190 195  
Asn Asp Phe Tyr Val Thr Gly Glu Ser Tyr Ala Gly Lys Tyr Val  
200 205 210  
Pro Ala Ile Ala His Leu Ile His Ser Leu Asn Pro Val Arg Glu  
215 220 225  
Val Lys Ile Asn Leu Asn Gly Ile Ala Ile Gly Asp Gly Tyr Ser  
230 235 240  
Asp Pro Glu Ser Ile Ile Gly Gly Tyr Ala Glu Phe Leu Tyr Gln  
245 250 255  
Ile Gly Leu Leu Asp Glu Lys Gln Lys Lys Tyr Phe Gln Lys Gln  
260 265 270

P1618P2C3 sequence listing.txt

Cys His Glu Cys	Ile Glu His Ile Arg	Lys Gln Asn Trp Phe	Glu
275		280	285
Ala Phe Glu Ile	Leu Asp Lys Leu Leu	Asp Gly Asp Leu Thr	Ser
290		295	300
Asp Pro Ser Tyr	Phe Gln Asn Val Thr	Gly Cys Ser Asn Tyr	Tyr
305		310	315
Asn Phe Leu Arg	Cys Thr Glu Pro Glu	Asp Gln Leu Tyr Tyr	Val
320		325	330
Lys Phe Leu Ser	Leu Pro Glu Val Arg	Gln Ala Ile His Val	Gly
335		340	345
Asn Gln Thr Phe	Asn Asp Gly Thr Ile	Val Glu Lys Tyr Leu	Arg
350		355	360
Glu Asp Thr Val	Gln Ser Val Lys Pro	Trp Leu Thr Glu Ile	Met
365		370	375
Asn Asn Tyr Lys	Val Leu Ile Tyr Asn	Gly Gln Leu Asp Ile	Ile
380		385	390
Val Ala Ala Ala	Leu Thr Glu Arg Ser	Leu Met Gly Met Asp	Trp
395		400	405
Lys Gly Ser Gln	Glu Tyr Lys Lys Ala	Glu Lys Lys Val Trp	Lys
410		415	420
Ile Phe Lys Ser	Asp Ser Glu Val Ala	Gly Tyr Ile Arg Gln	Ala
425		430	435
Gly Asp Phe His	Gln Val Ile Ile Arg	Gly Gly Gly His Ile	Leu
440		445	450
Pro Tyr Asp Gln	Pro Leu Arg Ala Phe	Asp Met Ile Asn Arg	Phe
455		460	465
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<220>  
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<210> 166  
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 <212> DNA  
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<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 166  
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P1618P2C3 sequence listing.txt

<210> 167  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
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<210> 168  
 <211> 50  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 168  
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<210> 169  
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 <212> DNA  
 <213> Homo Sapien

<400> 169  
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 agctagtgat caggggttct tcttgctgga gaagaaaggg ctgagggcag 150  
 agcagggcac tctcactcag ggtgaccagc tccttgccctc tctgtggata 200  
 acagagcatg agaaagtga gagatgcagc ggagtgaagt gatggaagtc 250  
 taaaatagga aggaattttg tgtgcaatat cagactctgg gagcagttga 300  
 cctggagagc ctggggggagg gcctgcctaa caagctttca aaaaacagga 350  
 gcgacttcca ctgggctggg ataagacgtg ccggtaggat aggggaagact 400  
 gggtttagtc ctaatatcaa attgactggc tgggtgaact tcaacagcct 450  
 tttaacctct ctgggagatg aaaacgatgg cttaaggggc cagaaataga 500  
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 gagaaagtat gttaaaaata gaaaaaccaa aatgcagaag gaggagactc 650  
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 ctcccggaaa ttatttttgg tctgaccact ctgccttggtg ttttgagaa 750  
 tcatgtgagg gccaacggg gaaggtggag cagatgagca cacacaggag 800  
 ccgtctctc accgccgccc ctctcagcat ggaacagagg cagccctggc 850

P1618P2C3 sequence listing.txt

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 ggacgggggc cgtctatgtg ggggccatca accgggtcta taagctgaca 1050  
 ggcaacctga ccatccaggt ggctcataag acagggccag aagaggacaa 1100  
 caagtctcgt taccgcccc tcctcgtgca gccctgcagc gaagtgtcta 1150  
 ccctcaccaa caatgtcaac aagctgtcta tcattgacta ctctgagaac 1200  
 cgcttgctgg cctgtgggag cctctaccag ggggtctgca agctgctgcg 1250  
 gctggatgac ctcttcatcc tgggtggagcc atcccacaag aaggagcact 1300  
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 cttctacatc tacggctttg ctagtggggg ctttgtctac tttctcactg 1600  
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 gccttcaata tcaccagcca ggacgatgta ctctttgcca tcttctccaa 1850  
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 tccctatccg ggccatcaac ttgcagatca aggagcgctt gcagtcctgc 1950  
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 acatcaacca gcccctggga ggctcaactc cagtggaggg cctgaccctg 2100  
 tacaccacca gcagggaccg catgacctct gtggcctcct acgtttacaa 2150  
 cggctacagc gtggtttttg tggggactaa gagtggcaag ctgaaaaagg 2200  
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 ggtcccctct tggaaggtag ctattggtgg agatttaact ataggcaact 2300  
 ttattttctt ggggaacaaa ggtgaaatgg ggaggtaaga aggggttaat 2350  
 tttgtgactt agcttctagc tacttctccc agccatcagt cattgggtat 2400  
 gtaaggaatg caagcgtatt tcaatatttc ccaaacttta agaaaaaact 2450

P1618P2C3 sequence listing.txt

ttaagaaggt acatctgcaa aagcaaa 2477

<210> 170

<211> 552

<212> PRT

<213> Homo Sapien

<400> 170

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Tyr	Phe	Trp	Ser	Asp	His	Ser	Ala	Leu	Cys	Phe	Ala	Glu	Ser	Cys	20	25	30	
Glu	Gly	Gln	Pro	Gly	Lys	Val	Glu	Gln	Met	Ser	Thr	His	Arg	Ser	35	40	45	
Arg	Leu	Leu	Thr	Ala	Ala	Pro	Leu	Ser	Met	Glu	Gln	Arg	Gln	Pro	50	55	60	
Trp	Pro	Arg	Ala	Leu	Glu	Val	Asp	Ser	Arg	Ser	Val	Val	Leu	Leu	65	70	75	
Ser	Val	Val	Trp	Val	Leu	Leu	Ala	Pro	Pro	Ala	Ala	Gly	Met	Pro	80	85	90	
Gln	Phe	Ser	Thr	Phe	His	Ser	Glu	Asn	Arg	Asp	Trp	Thr	Phe	Asn	95	100	105	
His	Leu	Thr	Val	His	Gln	Gly	Thr	Gly	Ala	Val	Tyr	Val	Gly	Ala	110	115	120	
Ile	Asn	Arg	Val	Tyr	Lys	Leu	Thr	Gly	Asn	Leu	Thr	Ile	Gln	Val	125	130	135	
Ala	His	Lys	Thr	Gly	Pro	Glu	Glu	Asp	Asn	Lys	Ser	Arg	Tyr	Pro	140	145	150	
Pro	Leu	Ile	Val	Gln	Pro	Cys	Ser	Glu	Val	Leu	Thr	Leu	Thr	Asn	155	160	165	
Asn	Val	Asn	Lys	Leu	Leu	Ile	Ile	Asp	Tyr	Ser	Glu	Asn	Arg	Leu	170	175	180	
Leu	Ala	Cys	Gly	Ser	Leu	Tyr	Gln	Gly	Val	Cys	Lys	Leu	Leu	Arg	185	190	195	
Leu	Asp	Asp	Leu	Phe	Ile	Leu	Val	Glu	Pro	Ser	His	Lys	Lys	Glu	200	205	210	
His	Tyr	Leu	Ser	Ser	Val	Asn	Lys	Thr	Gly	Thr	Met	Tyr	Gly	Val	215	220	225	
Ile	Val	Arg	Ser	Glu	Gly	Glu	Asp	Gly	Lys	Leu	Phe	Ile	Gly	Thr	230	235	240	
Ala	Val	Asp	Gly	Lys	Gln	Asp	Tyr	Phe	Pro	Thr	Leu	Ser	Ser	Arg	245	250	255	
Lys	Leu	Pro	Arg	Asp	Pro	Glu	Ser	Ser	Ala	Met	Leu	Asp	Tyr	Glu	260	265	270	



P1618P2C3 sequence listing.txt

Leu His Ser Asp	Phe Val Ser Ser Leu	Ile Lys Ile Pro Ser	Asp
	275	280	285
Thr Leu Ala Leu	Val Ser His Phe Asp	Ile Phe Tyr Ile Tyr	Gly
	290	295	300
Phe Ala Ser Gly	Gly Phe Val Tyr Phe	Leu Thr Val Gln Pro	Glu
	305	310	315
Thr Pro Glu Gly	Val Ala Ile Asn Ser	Ala Gly Asp Leu Phe	Tyr
	320	325	330
Thr Ser Arg Ile	Val Arg Leu Cys Lys	Asp Asp Pro Lys Phe	His
	335	340	345
Ser Tyr Val Ser	Leu Pro Phe Gly Cys	Thr Arg Ala Gly Val	Glu
	350	355	360
Tyr Arg Leu Leu	Gln Ala Ala Tyr Leu	Ala Lys Pro Gly Asp	Ser
	365	370	375
Leu Ala Gln Ala	Phe Asn Ile Thr Ser	Gln Asp Asp Val Leu	Phe
	380	385	390
Ala Ile Phe Ser	Lys Gly Gln Lys Gln	Tyr His His Pro Pro	Asp
	395	400	405
Asp Ser Ala Leu	Cys Ala Phe Pro Ile	Arg Ala Ile Asn Leu	Gln
	410	415	420
Ile Lys Glu Arg	Leu Gln Ser Cys Tyr	Gln Gly Glu Gly Asn	Leu
	425	430	435
Glu Leu Asn Trp	Leu Leu Gly Lys Asp	Val Gln Cys Thr Lys	Ala
	440	445	450
Pro Val Pro Ile	Asp Asp Asn Phe Cys	Gly Leu Asp Ile Asn	Gln
	455	460	465
Pro Leu Gly Gly	Ser Thr Pro Val Glu	Gly Leu Thr Leu Tyr	Thr
	470	475	480
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	485	490	495
Gly Tyr Ser Val	Val Phe Val Gly Thr	Lys Ser Gly Lys Leu	Lys
	500	505	510
Lys Val Arg Val	Tyr Glu Phe Arg Cys	Ser Asn Ala Ile His	Leu
	515	520	525
Leu Ser Lys Glu	Ser Leu Leu Glu Gly	Ser Tyr Trp Trp Arg	Phe
	530	535	540
Asn Tyr Arg Gln	Leu Tyr Phe Leu Gly	Glu Gln Arg	
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<211> 20

<212> DNA

<213> Artificial Sequence

<220>

P1618P2C3 sequence listing.txt

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<210> 172
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<212> DNA
<213> Artificial Sequence
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<223> Synthetic Oligonucleotide Probe
<400> 172
cttctgccct ttggagaaga tggc 24
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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

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<212> PRT  
<213> Homo Sapien

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Asp Trp Ser Thr Leu Val Pro Leu Arg Leu Arg His Arg Gln Leu  
35 40 45  
Gly Leu Gln Ala Lys Gly Trp Asn Phe Met Leu Glu Asp Ser Thr  
50 55 60  
Phe Trp Ile Phe Gly Gly Ser Ile His Tyr Phe Arg Val Pro Arg  
65 70 75

P1618P2C3 sequence listing.txt

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Asn Thr Leu Thr Thr	Tyr Val Pro Trp Asn	Leu His Glu Pro Glu	95	100	105
Arg Gly Lys Phe Asp	Phe Ser Gly Asn Leu	Asp Leu Glu Ala Phe	110	115	120
Val Leu Met Ala Ala	Glu Ile Gly Leu Trp	Val Ile Leu Arg Pro	125	130	135
Gly Pro Tyr Ile Cys	Ser Glu Met Asp Leu	Gly Gly Leu Pro Ser	140	145	150
Trp Leu Leu Gln Asp	Pro Gly Met Arg Leu	Arg Thr Thr Tyr Lys	155	160	165
Gly Phe Thr Glu Ala	Val Asp Leu Tyr Phe	Asp His Leu Met Ser	170	175	180
Arg Val Val Pro Leu	Gln Tyr Lys Arg Gly	Gly Pro Ile Ile Ala	185	190	195
Val Gln Val Glu Asn	Glu Tyr Gly Ser Tyr	Asn Lys Asp Pro Ala	200	205	210
Tyr Met Pro Tyr Val	Lys Lys Ala Leu Glu	Asp Arg Gly Ile Val	215	220	225
Glu Leu Leu Leu Thr	Ser Asp Asn Lys Asp	Gly Leu Ser Lys Gly	230	235	240
Ile Val Gln Gly Val	Leu Ala Thr Ile Asn	Leu Gln Ser Thr His	245	250	255
Glu Leu Gln Leu Leu	Thr Thr Phe Leu Phe	Asn Val Gln Gly Thr	260	265	270
Gln Pro Lys Met Val	Met Glu Tyr Trp Thr	Gly Trp Phe Asp Ser	275	280	285
Trp Gly Gly Pro His	Asn Ile Leu Asp Ser	Ser Glu Val Leu Lys	290	295	300
Thr Val Ser Ala Ile	Val Asp Ala Gly Ser	Ser Ile Asn Leu Tyr	305	310	315
Met Phe His Gly Gly	Thr Asn Phe Gly Phe	Met Asn Gly Ala Met	320	325	330
His Phe His Asp Tyr	Lys Ser Asp Val Thr	Ser Tyr Asp Tyr Asp	335	340	345
Ala Val Leu Thr Glu	Ala Gly Asp Tyr Thr	Ala Lys Tyr Met Lys	350	355	360
Leu Arg Asp Phe Phe	Gly Ser Ile Ser Gly	Ile Pro Leu Pro Pro	365	370	375
Pro Pro Asp Leu Leu	Pro Lys Met Pro Tyr	Glu Pro Leu Thr Pro	380	385	390

P1618P2C3 sequence listing.txt

Val	Leu	Tyr	Leu	Ser	Leu	Trp	Asp	Ala	Leu	Lys	Tyr	Leu	Gly	Glu
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				410					415					420
Asn	Gly	Gly	Asn	Gly	Gln	Ser	Phe	Gly	Tyr	Ile	Leu	Tyr	Glu	Thr
				425					430					435
Ser	Ile	Thr	Ser	Ser	Gly	Ile	Leu	Ser	Gly	His	Val	His	Asp	Arg
				440					445					450
Gly	Gln	Val	Phe	Val	Asn	Thr	Val	Ser	Ile	Gly	Phe	Leu	Asp	Tyr
				455					460					465
Lys	Thr	Thr	Lys	Ile	Ala	Val	Pro	Leu	Ile	Gln	Gly	Tyr	Thr	Val
				470					475					480
Leu	Arg	Ile	Leu	Val	Glu	Asn	Arg	Gly	Arg	Val	Asn	Tyr	Gly	Glu
				485					490					495
Asn	Ile	Asp	Asp	Gln	Arg	Lys	Gly	Leu	Ile	Gly	Asn	Leu	Tyr	Leu
				500					505					510
Asn	Asp	Ser	Pro	Leu	Lys	Asn	Phe	Arg	Ile	Tyr	Ser	Leu	Asp	Met
				515					520					525
Lys	Lys	Ser	Phe	Phe	Gln	Arg	Phe	Gly	Leu	Asp	Lys	Trp	Xaa	Ser
				530					535					540
Leu	Pro	Glu	Thr	Pro	Thr	Leu	Pro	Ala	Phe	Phe	Leu	Gly	Ser	Leu
				545					550					555
Ser	Ile	Ser	Ser	Thr	Pro	Cys	Asp	Thr	Phe	Leu	Lys	Leu	Glu	Gly
				560					565					570
Trp	Glu	Lys	Gly	Val	Val	Phe	Ile	Asn	Gly	Gln	Asn	Leu	Gly	Arg
				575					580					585
Tyr	Trp	Asn	Ile	Gly	Pro	Gln	Lys	Thr	Leu	Tyr	Leu	Pro	Gly	Pro
				590					595					600
Trp	Leu	Ser	Ser	Gly	Ile	Asn	Gln	Val	Ile	Val	Phe	Glu	Glu	Thr
				605					610					615
Met	Ala	Gly	Pro	Ala	Leu	Gln	Phe	Thr	Glu	Thr	Pro	His	Leu	Gly
				620					625					630
Arg	Asn	Gln	Tyr	Ile	Lys									
				635										

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 ggtcccagga ccctggtgag gggtctctac ttggccttcg gtgggggtca 100  
 agacgcaggc acctacgcca aaggggagca aagccgggct cggcccagg 150  
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P1618P2C3 sequence listing.txt

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gcttccttcc gattactacc agctatgact atgatgcacc tatacttgaa 1250
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cccataccat ttttgagcca acaccattct gggtgccaaa taatggagtc 1550
catgaccgtg cctatgtgat ggtggatggg gtgttccagg gtgttgtgga 1600
gcgaaatatg agagacaaac tatttttgac ggggaaactg ggggtccaaac 1650
tggatatctt ggtggagaac atggggaggc tcagctttgg gtctaacagc 1700

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P1618P2C3 sequence listing.txt

agtgacttca agggcctgtt gaagccacca attctggggc aaacaatcct 1750  
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ggtttcccct ccagttgccca aaatggccat atcctcaagc tccttctggc 1850  
cccacattct actccaaaac atttccaatt ttaggctcag ttggggacac 1900  
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ttaacttggg ccggtactgg acaaagcagg ggccacaaca gaccctctac 2000  
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agcctatcct caatagcact agtactttgc acaggacaca tatcaattcc 2150  
ctttcagctg atacactgag tgcctctgaa ccaatggagt taagtgggca 2200  
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ggcgtgatgg tgggcacctc taatcccagc tacttgggag gctgagggca 2400  
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aaaaa 2505

<210> 177  
<211> 654  
<212> PRT  
<213> Homo Sapien

<400> 177  
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1 5 10 15  
Leu Ser Leu Thr Leu Leu Leu Pro Gln Ala Asp Thr Arg Ser Phe  
20 25 30  
Val Val Asp Arg Gly His Asp Arg Phe Leu Leu Asp Gly Ala Pro  
35 40 45  
Phe Arg Tyr Val Ser Gly Ser Leu His Tyr Phe Arg Val Pro Arg  
50 55 60  
Val Leu Trp Ala Asp Arg Leu Leu Lys Met Arg Trp Ser Gly Leu  
65 70 75  
Asn Ala Ile Gln Phe Tyr Val Pro Trp Asn Tyr His Glu Pro Gln  
80 85 90  
Pro Gly Val Tyr Asn Phe Asn Gly Ser Arg Asp Leu Ile Ala Phe  
95 100 105  
Leu Asn Glu Ala Ala Leu Ala Asn Leu Leu Val Ile Leu Arg Pro  
110 115 120



P1618P2C3 sequence listing.txt

Gly	Pro	Tyr	Ile	Cys	Ala	Glu	Trp	Glu	Met	Gly	Gly	Leu	Pro	Ser
				125					130					135
Trp	Leu	Leu	Arg	Lys	Pro	Glu	Ile	His	Leu	Arg	Thr	Ser	Asp	Pro
				140					145					150
Asp	Phe	Leu	Ala	Ala	Val	Asp	Ser	Trp	Phe	Lys	Val	Leu	Leu	Pro
				155					160					165
Lys	Ile	Tyr	Pro	Trp	Leu	Tyr	His	Asn	Gly	Gly	Asn	Ile	Ile	Ser
				170					175					180
Ile	Gln	Val	Glu	Asn	Glu	Tyr	Gly	Ser	Tyr	Arg	Ala	Cys	Asp	Phe
				185					190					195
Ser	Tyr	Met	Arg	His	Leu	Ala	Gly	Leu	Phe	Arg	Ala	Leu	Leu	Gly
				200					205					210
Glu	Lys	Ile	Leu	Leu	Phe	Thr	Thr	Asp	Gly	Pro	Glu	Gly	Leu	Lys
				215					220					225
Cys	Gly	Ser	Leu	Arg	Gly	Leu	Tyr	Thr	Thr	Val	Asp	Phe	Gly	Pro
				230					235					240
Ala	Asp	Asn	Met	Thr	Lys	Ile	Phe	Thr	Leu	Leu	Arg	Lys	Tyr	Glu
				245					250					255
Pro	His	Gly	Pro	Leu	Val	Asn	Ser	Glu	Tyr	Tyr	Thr	Gly	Trp	Leu
				260					265					270
Asp	Tyr	Trp	Gly	Gln	Asn	His	Ser	Thr	Arg	Ser	Val	Ser	Ala	Val
				275					280					285
Thr	Lys	Gly	Leu	Glu	Asn	Met	Leu	Lys	Leu	Gly	Ala	Ser	Val	Asn
				290					295					300
Met	Tyr	Met	Phe	His	Gly	Gly	Thr	Asn	Phe	Gly	Tyr	Trp	Asn	Gly
				305					310					315
Ala	Asp	Lys	Lys	Gly	Arg	Phe	Leu	Pro	Ile	Thr	Thr	Ser	Tyr	Asp
				320					325					330
Tyr	Asp	Ala	Pro	Ile	Ser	Glu	Ala	Gly	Asp	Pro	Thr	Pro	Lys	Leu
				335					340					345
Phe	Ala	Leu	Arg	Asp	Val	Ile	Ser	Lys	Phe	Gln	Glu	Val	Pro	Leu
				350					355					360
Gly	Pro	Leu	Pro	Pro	Pro	Ser	Pro	Lys	Met	Met	Leu	Gly	Pro	Val
				365					370					375
Thr	Leu	His	Leu	Val	Gly	His	Leu	Leu	Ala	Phe	Leu	Asp	Leu	Leu
				380					385					390
Cys	Pro	Arg	Gly	Pro	Ile	His	Ser	Ile	Leu	Pro	Met	Thr	Phe	Glu
				395					400					405
Ala	Val	Lys	Gln	Asp	His	Gly	Phe	Met	Leu	Tyr	Arg	Thr	Tyr	Met
				410					415					420
Thr	His	Thr	Ile	Phe	Glu	Pro	Thr	Pro	Phe	Trp	Val	Pro	Asn	Asn
				425					430					435

P1618P2C3 sequence listing.txt

Gly Val His Asp	Arg Ala Tyr Val Met	Val Asp Gly Val Phe	Gln
	440	445	450
Gly Val Val Glu	Arg Asn Met Arg Asp	Lys Leu Phe Leu Thr	Gly
	455	460	465
Lys Leu Gly Ser	Lys Leu Asp Ile Leu	Val Glu Asn Met Gly	Arg
	470	475	480
Leu Ser Phe Gly	Ser Asn Ser Ser Asp	Phe Lys Gly Leu Leu	Lys
	485	490	495
Pro Pro Ile Leu	Gly Gln Thr Ile Leu	Thr Gln Trp Met Met	Phe
	500	505	510
Pro Leu Lys Ile	Asp Asn Leu Val Lys	Trp Trp Phe Pro Leu	Gln
	515	520	525
Leu Pro Lys Trp	Pro Tyr Pro Gln Ala	Pro Ser Gly Pro Thr	Phe
	530	535	540
Tyr Ser Lys Thr	Phe Pro Ile Leu Gly	Ser Val Gly Asp Thr	Phe
	545	550	555
Leu Tyr Leu Pro	Gly Trp Thr Lys Gly	Gln Val Trp Ile Asn	Gly
	560	565	570
Phe Asn Leu Gly	Arg Tyr Trp Thr Lys	Gln Gly Pro Gln Gln	Thr
	575	580	585
Leu Tyr Val Pro	Arg Phe Leu Leu Phe	Pro Arg Gly Ala Leu	Asn
	590	595	600
Lys Ile Thr Leu	Leu Glu Leu Glu Asp	Val Pro Leu Gln Pro	Gln
	605	610	615
Val Gln Phe Leu	Asp Lys Pro Ile Leu	Asn Ser Thr Ser Thr	Leu
	620	625	630
His Arg Thr His	Ile Asn Ser Leu Ser	Ala Asp Thr Leu Ser	Ala
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Ser Glu Pro Met	Glu Leu Ser Gly His		
	650		

<210> 178

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 178

tggtactcc aagaccctgg catg 24

<210> 179

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

P1618P2C3 sequence listing.txt

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<223> Synthetic Oligonucleotide Probe
<400> 179
    tggacaaatc cccttgctca gccc 24
<210> 180
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe
<400> 180
    gggcttcacc gaagcagtgg acctttatatt tgaccacctg atgtccaggg 50
<210> 181
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe
<400> 181
    ccagctatga ctatgatgca cc 22
<210> 182
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe
<400> 182
    tggcacccag aatggtggtg gctc 24
<210> 183
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe
<400> 183
    cgagatgtca tcagcaagtt ccaggaagtt cctttgggac ctttacctcc 50
<210> 184
<211> 1947
<212> DNA
<213> Homo Sapien

<400> 184
    gctttgaaca cgtctgcaag cccaaagttg agcatctgat tggttatgag 50
    gtatttgagt gcaccacaaa tatggcttac atgttgaaaa agcttctcat 100
    cagttacata tccattatatt gtgtttatgg ctttatctgc ctctacactc 150
    tcttctgggtt attcaggata ctttgaagg aatattcttt cgaaaaagtc 200

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P1618P2C3 sequence listing.txt

agagaagaga gcagtttttag tgacattcca gatgtcaaaa acgattttgc 250  
gttccttctt cacatggttag accagtatga ccagctatat tccaagcggt 300  
ttggtgtgtt cttgtcagaa gttagtgaat ataaacttag ggaaattagt 350  
ttgaaccatg agtggacatt tgaaaaactc aggcagcaca tttcacgcaa 400  
cgcccaggac aagcaggagt tgcattctgt catgctgtcg ggggtgcccg 450  
atgctgtctt tgacctcaca gacctggatg tgctaaagct tgaactaatt 500  
ccagaagcta aaattcctgc taagatttct caaatgacta acctccaaga 550  
gctccacctc tgccactgcc ctgcaaaagt tgaacagact gcttttagct 600  
ttcttcgcga tcaattgaga tgccttcacg tgaagttcac tgatgtggct 650  
gaaattcctg cctgggtgta tttgtcaaa aaccttcgag agttgtactt 700  
aataggcaat ttgaactctg aaaacaataa gatgatagga cttgaatctc 750  
tccgagagtt gcggcacctt aagattctcc acgtgaagag caatttgacc 800  
aaagtccct ccaacattac agatgtggct ccacattcta caaagttagt 850  
cattcataat gacggcacta aactcttggg actgaacagc cttagaagaaa 900  
tgatgaatgt cgctgagctg gaactccaga actgtgagct agagagaatc 950  
ccacatgcta ttttcagcct ctctaattta caggaactgg atttaaagtc 1000  
caataacatt cgcaaatg aggaatcat cagtttcag catttaaac 1050  
gactgacttg tttaaaatta tggcataaca aaattgttac tattcctccc 1100  
tctattacc atgtcaaaaa cttggagtca ctttatttct ctaacaaca 1150  
gctcgaatcc ttaccagtgg cagtatttag ttacagaaa ctcatgct 1200  
tagatgtgag ctacaacaac atttcaatga ttccaataga aataggattg 1250  
cttcagaacc tgcagcattt gcatactact ggaacaaag tggacattct 1300  
gccaaaaca ttgtttaaat gcataaagtt gaggacttg aatctgggac 1350  
agaactgcat cacctcactc ccagagaaag ttggtcagct ctcccagctc 1400  
actcagctgg agctgaaggg gaactgcttg gaccgcctgc cagcccagct 1450  
gggccagtgt cggatgctca agaaaagcgg gcttgttggt gaagatcacc 1500  
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aatattccct ttgcaaatgg gatttaaact aagataatat atgcacagt 1600  
atgtgcagga acaacttcct agattgcaag tgctcacgta caagttatta 1650  
caagataatg catttttagg gtagatacat cttttaaaat aaaacagaga 1700  
ggatgcatag aaggctgata gaagacataa ctgaatgttc aatgtttgta 1750  
gggttttaag tcattcattt ccaaatcatt ttttttttc ttttggggaa 1800

P1618P2C3 sequence listing.txt

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 taacttggat gctgccgcta ctgaatgttt acaaattgct tgcctgctaa 1900  
 agtaaatagat taaattgaca ttttcttact aaaaaaaaaa aaaaaaa 1947

<210> 185  
 <211> 501  
 <212> PRT  
 <213> Homo Sapien

<400> 185  
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 Phe Arg Ile Pro Leu Lys Glu Tyr Ser Phe Glu Lys Val Arg Glu  
 35 40 45  
 Glu Ser Ser Phe Ser Asp Ile Pro Asp Val Lys Asn Asp Phe Ala  
 50 55 60  
 Phe Leu Leu His Met Val Asp Gln Tyr Asp Gln Leu Tyr Ser Lys  
 65 70 75  
 Arg Phe Gly Val Phe Leu Ser Glu Val Ser Glu Asn Lys Leu Arg  
 80 85 90  
 Glu Ile Ser Leu Asn His Glu Trp Thr Phe Glu Lys Leu Arg Gln  
 95 100 105  
 His Ile Ser Arg Asn Ala Gln Asp Lys Gln Glu Leu His Leu Phe  
 110 115 120  
 Met Leu Ser Gly Val Pro Asp Ala Val Phe Asp Leu Thr Asp Leu  
 125 130 135  
 Asp Val Leu Lys Leu Glu Leu Ile Pro Glu Ala Lys Ile Pro Ala  
 140 145 150  
 Lys Ile Ser Gln Met Thr Asn Leu Gln Glu Leu His Leu Cys His  
 155 160 165  
 Cys Pro Ala Lys Val Glu Gln Thr Ala Phe Ser Phe Leu Arg Asp  
 170 175 180  
 His Leu Arg Cys Leu His Val Lys Phe Thr Asp Val Ala Glu Ile  
 185 190 195  
 Pro Ala Trp Val Tyr Leu Leu Lys Asn Leu Arg Glu Leu Tyr Leu  
 200 205 210  
 Ile Gly Asn Leu Asn Ser Glu Asn Asn Lys Met Ile Gly Leu Glu  
 215 220 225  
 Ser Leu Arg Glu Leu Arg His Leu Lys Ile Leu His Val Lys Ser  
 230 235 240  
 Asn Leu Thr Lys Val Pro Ser Asn Ile Thr Asp Val Ala Pro His  
 245 250 255

P1618P2C3 sequence listing.txt

Leu Thr Lys Leu Val	Ile His Asn Asp Gly Thr Lys Leu Leu Val
260	265 270
Leu Asn Ser Leu Lys	Lys Met Met Asn Val Ala Glu Leu Glu Leu
275	280 285
Gln Asn Cys Glu Leu	Glu Arg Ile Pro His Ala Ile Phe Ser Leu
290	295 300
Ser Asn Leu Gln Glu	Leu Asp Leu Lys Ser Asn Asn Ile Arg Thr
305	310 315
Ile Glu Glu Ile Ile	Ser Phe Gln His Leu Lys Arg Leu Thr Cys
320	325 330
Leu Lys Leu Trp His	Asn Lys Ile Val Thr Ile Pro Pro Ser Ile
335	340 345
Thr His Val Lys Asn	Leu Glu Ser Leu Tyr Phe Ser Asn Asn Lys
350	355 360
Leu Glu Ser Leu Pro	Val Ala Val Phe Ser Leu Gln Lys Leu Arg
365	370 375
Cys Leu Asp Val Ser	Tyr Asn Asn Ile Ser Met Ile Pro Ile Glu
380	385 390
Ile Gly Leu Leu Gln	Asn Leu Gln His Leu His Ile Thr Gly Asn
395	400 405
Lys Val Asp Ile Leu	Pro Lys Gln Leu Phe Lys Cys Ile Lys Leu
410	415 420
Arg Thr Leu Asn Leu	Gly Gln Asn Cys Ile Thr Ser Leu Pro Glu
425	430 435
Lys Val Gly Gln Leu	Ser Gln Leu Thr Gln Leu Glu Leu Lys Gly
440	445 450
Asn Cys Leu Asp Arg	Leu Pro Ala Gln Leu Gly Gln Cys Arg Met
455	460 465
Leu Lys Lys Ser Gly	Leu Val Val Glu Asp His Leu Phe Asp Thr
470	475 480
Leu Pro Leu Glu Val	Lys Glu Ala Leu Asn Gln Asp Ile Asn Ile
485	490 495
Pro Phe Ala Asn Gly	Ile
500	

<210> 186

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<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 186

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P1618P2C3 sequence listing.txt

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 <212> DNA  
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<220>  
 <223> Synthetic Oligonucleotide Probe

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<210> 188  
 <211> 47  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 188  
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<210> 189  
 <211> 2917  
 <212> DNA  
 <213> Homo Sapien

<400> 189  
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 tgacaaactg acttttttta tttctttttt tccatctctg ggccagcttg 100  
 ggatcctagg ccgccctggg aagacatttg tgttttacac acataaggat 150  
 ctgtgtttgg ggtttcttct tcctcccctg acattggcat tgcttagtgg 200  
 ttgtgtgggg agggagacca cgtgggctca gtgcttgctt gcacttatct 250  
 gcctaggtag atcgaagtct ttgacctcc atacagtgat tatgcctgtc 300  
 atcgctggtg gtatcctggc ggccttgctc ctgctgatag ttgtcgtgct 350  
 ctgtctttac ttcaaaatac acaacgcgt aaaagctgca aaggaacctg 400  
 aagctgtggc tgtaaaaaat cacaaccag acaagggtgtg gtgggccaag 450  
 aacagccagg ccaaaacctat tgccacggag tcttgtcctg ccctgcagtg 500  
 ctgtgaagga tatagaatgt gtgccagttt tgattccctg ccaccttgct 550  
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 cactgggggc aacccttcca ggaaggagtt ggggagagag aaccctcact 800  
 gtggggaatg ctgataaacc agtcacacag ctgctctatt ctcacacaaa 850  
 tctaccctt gcgtggctgg aactgacgtt tccctggagg tgtccagaaa 900

P1618P2C3 sequence listing.txt

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gcaagctgca cagtcagtct aggggggtgcc aatatggcag agaccacaa 1100  
agccatgatc ctgcaactca atcccagtga gaactgcacc tggacaatag 1150  
aaagaccaga aaacaaaagc atcagaatta tcttttccta tgtccagctt 1200  
gatccagatg gaagctgtga aagtgaaaac attaaagtct ttgacggaac 1250  
ctccagcaat gggcctctgc tagggcaagt ctgcagtaaa aacgactatg 1300  
ttcctgtatt tgaatcatca tccagtacat tgacgtttca aatagttact 1350  
gactcagcaa gaattcaaag aactgtcttt gtcttctact acttcttctc 1400  
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gttgtctaca gattatgcca attcttaccg gggattttct gcttcctaca 1750  
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caaagtgtgt ggaattttct gtccctctta atggatgtgg tacaatcaga 1950  
aaggtagaag atcagtcaat tacttacacc aatataatca cttttctgc 2000  
atcctcaact tctgaagtga tcacccgtca gaaacaactc cagattattg 2050  
tgaagtgtga aatgggacat aattctacag tggagataat atacataaca 2100  
gaagatgatg taatacaaag tcaaaatgca ctgggcaaat ataacaccag 2150  
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ttccagttta atgcctttaa attcttgaga agtatgagct ctgtgtatct 2450



P1618P2C3 sequence listing.txt

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aaaacagatt ccatcatagg acccattcgt ctgaaaaggg atcgaagtgc 2600  
aagtggcaat tcaggatttc agcatgaaac acatgcggaa gaaactccaa 2650  
accagccttt caacagtgtg catctgtttt ccttcatggg tctagctctg 2700  
aatgtgggtga ctgtagcgac aatcacagtg aggcattttg taaatcaacg 2750  
ggcagactac aaataccaga agctgcagaa ctattaacta acaggtccaa 2800  
ccctaagtga gacatgtttc tccaggatgc caaaggaaat gctacctcgt 2850  
ggctacacat attatgaata aatgaggaag ggctgaaag tgacacacag 2900  
gcctgcatgt aaaaaaa 2917

<210> 190  
<211> 607  
<212> PRT  
<213> Homo Sapien

<400> 190  
Met Glu Leu Val Arg Arg Leu Met Pro Leu Thr Leu Leu Ile Leu  
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Ser Cys Leu Ala Glu Leu Thr Met Ala Glu Ala Glu Gly Asn Ala  
20 25 30  
Ser Cys Thr Val Ser Leu Gly Gly Ala Asn Met Ala Glu Thr His  
35 40 45  
Lys Ala Met Ile Leu Gln Leu Asn Pro Ser Glu Asn Cys Thr Trp  
50 55 60  
Thr Ile Glu Arg Pro Glu Asn Lys Ser Ile Arg Ile Ile Phe Ser  
65 70 75  
Tyr Val Gln Leu Asp Pro Asp Gly Ser Cys Glu Ser Glu Asn Ile  
80 85 90  
Lys Val Phe Asp Gly Thr Ser Ser Asn Gly Pro Leu Leu Gly Gln  
95 100 105  
Val Cys Ser Lys Asn Asp Tyr Val Pro Val Phe Glu Ser Ser Ser  
110 115 120  
Ser Thr Leu Thr Phe Gln Ile Val Thr Asp Ser Ala Arg Ile Gln  
125 130 135  
Arg Thr Val Phe Val Phe Tyr Tyr Phe Phe Ser Pro Asn Ile Ser  
140 145 150  
Ile Pro Asn Cys Gly Gly Tyr Leu Asp Thr Leu Glu Gly Ser Phe  
155 160 165  
Thr Ser Pro Asn Tyr Pro Lys Pro His Pro Glu Leu Ala Tyr Cys  
170 175 180  
Val Trp His Ile Gln Val Glu Lys Asp Tyr Lys Ile Lys Leu Asn  
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P1618P2C3 sequence listing.txt

185	190	195
Phe Lys Glu Ile	Phe Leu Glu Ile Asp	Lys Gln Cys Lys Phe Asp
200	205	210
Phe Leu Ala Ile	Tyr Asp Gly Pro Ser	Thr Asn Ser Gly Leu Ile
215	220	225
Gly Gln Val Cys	Gly Arg Val Thr Pro	Thr Phe Glu Ser Ser
230	235	240
Asn Ser Leu Thr	Val Val Leu Ser Thr	Asp Tyr Ala Asn Ser
245	250	255
Arg Gly Phe Ser	Ala Ser Tyr Thr Ser	Ile Tyr Ala Glu Asn Ile
260	265	270
Asn Thr Thr Ser	Leu Thr Cys Ser Ser	Asp Arg Met Arg Val Ile
275	280	285
Ile Ser Lys Ser	Tyr Leu Glu Ala Phe	Asn Ser Asn Gly Asn Asn
290	295	300
Leu Gln Leu Lys	Asp Pro Thr Cys Arg	Pro Lys Leu Ser Asn Val
305	310	315
Val Glu Phe Ser	Val Pro Leu Asn Gly	Cys Gly Thr Ile Arg Lys
320	325	330
Val Glu Asp Gln	Ser Ile Thr Tyr Thr	Asn Ile Ile Thr Phe Ser
335	340	345
Ala Ser Ser Thr	Ser Glu Val Ile Thr	Arg Gln Lys Gln Leu Gln
350	355	360
Ile Ile Val Lys	Cys Glu Met Gly His	Asn Ser Thr Val Glu Ile
365	370	375
Ile Tyr Ile Thr	Glu Asp Asp Val Ile	Gln Ser Gln Asn Ala Leu
380	385	390
Gly Lys Tyr Asn	Thr Ser Met Ala Leu	Phe Glu Ser Asn Ser Phe
395	400	405
Glu Lys Thr Ile	Leu Glu Ser Pro Tyr	Tyr Val Asp Leu Asn Gln
410	415	420
Thr Leu Phe Val	Gln Val Ser Leu His	Thr Ser Asp Pro Asn Leu
425	430	435
Val Val Phe Leu	Asp Thr Cys Arg Ala	Ser Pro Thr Ser Asp Phe
440	445	450
Ala Ser Pro Thr	Tyr Asp Leu Ile Lys	Ser Gly Cys Ser Arg Asp
455	460	465
Glu Thr Cys Lys	Val Tyr Pro Leu Phe	Gly His Tyr Gly Arg Phe
470	475	480
Gln Phe Asn Ala	Phe Lys Phe Leu Arg	Ser Met Ser Ser Val Tyr
485	490	495
Leu Gln Cys Lys	Val Leu Ile Cys Asp	Ser Ser Asp His Gln Ser

P1618P2C3 sequence listing.txt

500		510
Arg Cys Asn Gln Gly Cys Val Ser Arg Ser Lys Arg Asp Ile Ser	505	525
Ser Tyr Lys Trp Lys Thr Asp Ser Ile Ile Gly Pro Ile Arg Leu	530	540
Lys Arg Asp Arg Ser Ala Ser Gly Asn Ser Gly Phe Gln His Glu	545	555
Thr His Ala Glu Glu Thr Pro Asn Gln Pro Phe Asn Ser Val His	560	570
Leu Phe Ser Phe Met Val Leu Ala Leu Asn Val Val Thr Val Ala	575	585
Thr Ile Thr Val Arg His Phe Val Asn Gln Arg Ala Asp Tyr Lys	590	600
Tyr Gln Lys Leu Gln Asn Tyr	605	

<210> 191

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 191

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<210> 192

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 192

tttgatgacg attcgaaggt gg 22

<210> 193

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 193

ggaaggatcc ttcaccagcc ccaattaccc aaagccgcac cctgagc 47

<210> 194

<211> 2362

<212> DNA

<213> Homo Sapien

<400> 194

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P1618P2C3 sequence listing.txt

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 cacagcgcca cgcgcttcga cccacactgg gagtccctgg acgcccgcca 200  
 gctgccccgcg tggtttgacc aggccaagtt cggcatcttc atccactggg 250  
 gagtgttttc cgtgcccagc ttcggtagcg agtggttctg gtggtattgg 300  
 caaaaggaaa agataccgaa gtatgtggaa tttatgaaag ataattacc 350  
 tcctagtttc aaatatgaag attttggacc actatttaca gcaaaatttt 400  
 ttaatgccaa ccagtgggca gatatttttc aggcctctgg tgccaaatac 450  
 attgtcttaa cttccaaaca tcatgaaggc tttaccttgt gggggtcaga 500  
 atattcgtgg aactggaatg ccatagatga ggggcccag agggacattg 550  
 tcaaggaaact tgaggtagcc attaggaaca gaactgacct gcgttttgg 600  
 ctgtactatt ccttttttga atggtttcat ccgctcttcc ttgaggatga 650  
 atccagtcca ttccataagc ggcaatttcc agtttctaag acattgccag 700  
 agctctatga gttagtgaac aactatcagc ctgaggttct gtggtcggat 750  
 ggtgacggag gagcaccgga tcaatactgg aacagcacag gcttcttggc 800  
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 gttggggagc tggtagcatc tgtaagcatg gtggcttcta tacctgcagt 900  
 gatcgttata acccaggaca tcttttgcca cataaatggg aaaactgcat 950  
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 tgtggaggaa atcttttgat gaatattggg cccacactag atggcaccat 1100  
 ttctgtagtt tttgaggagc gactgaggca agtggggctc tggctaaaag 1150  
 tcaatggaga agctatttat gaaacctata cctggcgatc ccagaatgac 1200  
 actgtcacc cagatgtgtg gtacacatcc aagcctaaag aaaaattagt 1250  
 ctatgccatt tttcttaa atggccacatc aggacagctg ttccttggcc 1300  
 atcccaaagc tattctgggg gcaacagagg tgaaactact gggccatgga 1350  
 cagccactta actggatttc tttggagcaa aatggcatta tggtagaact 1400  
 gccacagcta accattcatc agatgccgtg taaatggggc tgggctctag 1450  
 ccctaactaa tgtgatctaa agtgcagcag agtggctgat gctgcaagtt 1500  
 atgtctaagg ctaggaacta tcaggtgtct ataattgtag cacatggaga 1550  
 aagcaatgta aactggataa gaaaattatt tggcagttca gccctttccc 1600

P1618P2C3 sequence listing.txt

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 tgactcagag gtgagaattht tttcacatta tagtagcaag gaattggtgg 1750  
 tattatggac cgaactgaaa attttatgtt gaagccatat ccccatgat 1800  
 tatatagtta tgcatacatt aatatgggga ttttttctgg gaaatgcatt 1850  
 gctagtcaat ttttttttgt gccaacatca tagagtgtat ttacaaaatc 1900  
 ctagatggca tagcctacta cacacctaatt gtgtatggta tagactgttg 1950  
 ctctagggt acagacatat acagcatgtt actgaatact gtaggcaata 2000  
 gtaacagtgg tttttgtata tcgaaacata tggaaacata gagaaggtag 2050  
 agtaaaaaata ctgtaaaata aatgggtgcac ctgtataggg cacttaccac 2100  
 gaatggagct tacaggactg gaagttgctc tgggtgagtc agtgagtga 2150  
 tgtgaaggcc taggacatta ttgaacactg ccagacgtta taaatactgt 2200  
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 ataaattaac ataagtgtac tgtaacttta caaacgtttt aatttttaaa 2300  
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 gtgcaaatgt aa 2362

<210> 195  
 <211> 467  
 <212> PRT  
 <213> Homo sapien

<400> 195  
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 Leu Leu Leu Leu Leu Leu Pro Pro Pro Pro Cys Pro Ala His Ser  
 20 25 30  
 Ala Thr Arg Phe Asp Pro Thr Trp Glu Ser Leu Asp Ala Arg Gln  
 35 40 45  
 Leu Pro Ala Trp Phe Asp Gln Ala Lys Phe Gly Ile Phe Ile His  
 50 55 60  
 Trp Gly Val Phe Ser Val Pro Ser Phe Gly Ser Glu Trp Phe Trp  
 65 70 75  
 Trp Tyr Trp Gln Lys Glu Lys Ile Pro Lys Tyr Val Glu Phe Met  
 80 85 90  
 Lys Asp Asn Tyr Pro Pro Ser Phe Lys Tyr Glu Asp Phe Gly Pro  
 95 100 105  
 Leu Phe Thr Ala Lys Phe Phe Asn Ala Asn Gln Trp Ala Asp Ile  
 110 115 120  
 Phe Gln Ala Ser Gly Ala Lys Tyr Ile Val Leu Thr Ser Lys His  
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P1618P2C3 sequence listing.txt

	125		130		135
His Glu Gly Phe	Thr 140	Leu Trp Gly Ser	Glu 145	Tyr Ser Trp Asn	Trp 150
Asn Ala Ile Asp	Glu 155	Gly Pro Lys Arg	Asp 160	Ile Val Lys Glu	Leu 165
Glu Val Ala Ile	Arg 170	Asn Arg Thr Asp	Leu 175	Arg Phe Gly Leu	Tyr 180
Tyr Ser Leu Phe	Glu 185	Trp Phe His Pro	Leu 190	Phe Leu Glu Asp	Glu 195
Ser Ser Ser Phe	His 200	Lys Arg Gln Phe	Pro 205	Val Ser Lys Thr	Leu 210
Pro Glu Leu Tyr	Glu 215	Leu Val Asn Asn	Tyr 220	Gln Pro Glu Val	Leu 225
Trp Ser Asp Gly	Asp 230	Gly Gly Ala Pro	Asp 235	Gln Tyr Trp Asn	Ser 240
Thr Gly Phe Leu	Ala 245	Trp Leu Tyr Asn	Glu 250	Ser Pro Val Arg	Gly 255
Thr val val Thr	Asn 260	Asp Arg Trp Gly	Ala 265	Gly Ser Ile Cys	Lys 270
His Gly Gly Phe	Tyr 275	Thr Cys Ser Asp	Arg 280	Tyr Asn Pro Gly	His 285
Leu Leu Pro His	Lys 290	Trp Glu Asn Cys	Met 295	Thr Ile Asp Lys	Leu 300
Ser Trp Gly Tyr	Arg 305	Arg Glu Ala Gly	Ile 310	Ser Asp Tyr Leu	Thr 315
Ile Glu Glu Leu	Val 320	Lys Gln Leu val	Glu 325	Thr val ser Cys	Gly 330
Gly Asn Leu Leu	Met 335	Asn Ile Gly Pro	Thr 340	Leu Asp Gly Thr	Ile 345
Ser val val Phe	Glu 350	Glu Arg Leu Arg	Gln 355	Val Gly Ser Trp	Leu 360
Lys val Asn Gly	Glu 365	Ala Ile Tyr Glu	Thr 370	Tyr Thr Trp Arg	Ser 375
Gln Asn Asp Thr	Val 380	Thr Pro Asp Val	Trp 385	Tyr Thr Ser Lys	Pro 390
Lys Glu Lys Leu	Val 395	Tyr Ala Ile Phe	Leu 400	Lys Trp Pro Thr	Ser 405
Gly Gln Leu Phe	Leu 410	Gly His Pro Lys	Ala 415	Ile Leu Gly Ala	Thr 420
Glu val Lys Leu	Leu 425	Gly His Gly Gln	Pro 430	Leu Asn Trp Ile	Ser 435
Leu Glu Gln Asn	Gly Ile Met Val	Glu Leu Pro Gln	Leu Thr Ile		

P1618P2C3 sequence listing.txt

440 445 450

His Gln Met Pro Cys Lys Trp Gly Trp Ala Leu Ala Leu Thr Asn  
455 460 465

Val Ile

<210> 196  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 196  
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<210> 197  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 197  
ggattcatcc tcaaggaaga gcgg 24

<210> 198  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 198  
aacttgcagc atcagccact ctgc 24

<210> 199  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 199  
ttccgtgccc agcttcggtgta gcgagtgggt ctggtgggtat tggca 45

<210> 200  
<211> 2372  
<212> DNA  
<213> Homo Sapien

<400> 200  
agcagggaaa tccggatgtc tcggttatga agtggagcag tgagtgtgag 50  
cctcaacata gttccagaac tctccatccg gactagttat tgagcatctg 100  
cctctcatat caccagtggc catctgaggt gtttccctgg ctctgaaggg 150

P1618P2C3 sequence listing.txt

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ccatccaggt gtcattgcaga attatgggga tcacccttgt gagcaaaaag 300  
gcgaaccagc agctgaattt cacagaagct aaggaggcct gtaggctgct 350  
gggactaagt ttggccggca aggaccaagt tgaaacagcc ttgaaagcta 400  
gctttgaaac ttgcagctat ggctgggttg gagatggatt cgtggtcattc 450  
tctaggatta gccccaaacc caagtgtggg aaaaatgggg tgggtgtcct 500  
gatttggaag gttccagtga gccgacagtt tgcagcctat tgttacaact 550  
catctgatac ttggactaac tcgtgcattc cagaaattat caccacaaa 600  
gatcccatat tcaacactca aactgcaaca caaacaacag aatttattgt 650  
cagtgcagct acctactcgg tggcatcccc ttactctaca atacctgccc 700  
ctactactac tcctcctgct ccagcttcca cttctattcc acggagaaaa 750  
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ctgggttttg aggtgtcccc acggctctgc tagtgcttgc tctcctcttc 900  
tttggtgctg cagctggtct tggattttgc tatgtcaaaa ggtatgtgaa 950  
ggccttcctt ttacaaaca agaatacagca gaaggaaatg atcgaaacca 1000  
aagtagtaaa ggaggagaag gccaatgata gcaaccctaa tgaggaaatca 1050  
aagaaaactg ataaaaaccc agaagagtcc aagagtccaa gcaaaactac 1100  
cgtgcgatgc ctggaagctg aagtttagat gagacagaaa tgaggagaca 1150  
cacctgaggc tggtttcttt catgctcctt accctgcccc agctggggaa 1200  
atcaaaaggg ccaaagaacc aaagaagaaa gtccaccctt gggttcctaac 1250  
tggaatcagc tcaggactgc cattggacta tggagtgcac caaagagaat 1300  
gcccttctcc ttattgtaac cctgtctgga tcctatcttc ctacctcaa 1350  
agcttccac gccctttcta gcctggctat gtcctaataa tatccactg 1400  
ggagaaaagga gttttgcaaa gtgcaaggac ctaaaacatc tcattcagtat 1450  
ccagtggtaa aaaggcctcc tggctgtctg aggctaggtg ggttgaaagc 1500  
caaggagtca ctgagaccaa ggctttctct actgattccg cagctcagac 1550  
cctttcttca gctctgaaag agaaacacgt atcccacctg acatgtcctt 1600  
ctgagcccg taagagcaaa agaattggcag aaaagtttag cccctgaaag 1650  
ccatggagat tctcataact tgagacctaa tctctgtaaa gctaaaataa 1700



P1618P2C3 sequence listing.txt

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 taaacacaga caggggtcaaa gtgttttctc tgaacacatt gagttggaat 1800  
 cactgttttag aacacacaca cttacttttt ctggtctcta ccactgctga 1850  
 tatttttctct aggaaatata cttttacaag taacaaaaat aaaaactctt 1900  
 ataaatttct atttttatct gagttacaga aatgattact aaggaagatt 1950  
 actcagtaat ttgttttaaaa agtaataaaa ttcaacaaac atttgctgaa 2000  
 tagctactat atgtcaagtg ctgtgcaagg tattacactc tgtaattgaa 2050  
 tattatttct caaaaattg cacatagtag aacgctatct gggaagctat 2100  
 ttttttcagt ttgatattt ctagcttatt tacttccaaa ctaattttta 2150  
 tttttgctga gactaatctt attcattttc tctaatatgg caaccattat 2200  
 aaccttaatt tattattaac atacctaaga agtacattgt tacctctata 2250  
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 aattaaagca tttagaaaac tt 2372

<210> 201  
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 Ser Ile Gln Val Ser Cys Arg Ile Met Gly Ile Thr Leu Val Ser  
 35 40 45  
 Lys Lys Ala Asn Gln Gln Leu Asn Phe Thr Glu Ala Lys Glu Ala  
 50 55 60  
 Cys Arg Leu Leu Gly Leu Ser Leu Ala Gly Lys Asp Gln Val Glu  
 65 70 75  
 Thr Ala Leu Lys Ala Ser Phe Glu Thr Cys Ser Tyr Gly Trp Val  
 80 85 90  
 Gly Asp Gly Phe Val Val Ile Ser Arg Ile Ser Pro Asn Pro Lys  
 95 100 105  
 Cys Gly Lys Asn Gly Val Gly Val Leu Ile Trp Lys Val Pro Val  
 110 115 120  
 Ser Arg Gln Phe Ala Ala Tyr Cys Tyr Asn Ser Ser Asp Thr Trp  
 125 130 135  
 Thr Asn Ser Cys Ile Pro Glu Ile Ile Thr Thr Lys Asp Pro Ile  
 140 145 150

P1618P2C3 sequence listing.txt

Phe Asn Thr Gln Thr Ala Thr Gln Thr	Thr Glu Phe Ile Val Ser	155	160	165
Asp Ser Thr Tyr Ser Val Ala Ser Pro	Tyr Ser Thr Ile Pro Ala	170	175	180
Pro Thr Thr Thr Pro Pro Ala Pro Ala	Ser Thr Ser Ile Pro Arg	185	190	195
Arg Lys Lys Leu Ile Cys Val Thr Glu	Val Phe Met Glu Thr Ser	200	205	210
Thr Met Ser Thr Glu Thr Glu Pro Phe	Val Glu Asn Lys Ala Ala	215	220	225
Phe Lys Asn Glu Ala Ala Gly Phe Gly	Gly Val Pro Thr Ala Leu	230	235	240
Leu Val Leu Ala Leu Leu Phe Phe Gly	Ala Ala Ala Gly Leu Gly	245	250	255
Phe Cys Tyr Val Lys Arg Tyr Val Lys	Ala Phe Pro Phe Thr Asn	260	265	270
Lys Asn Gln Gln Lys Glu Met Ile Glu	Thr Lys Val Val Lys Glu	275	280	285
Glu Lys Ala Asn Asp Ser Asn Pro Asn	Glu Glu Ser Lys Lys Thr	290	295	300
Asp Lys Asn Pro Glu Glu Ser Lys Ser	Pro Ser Lys Thr Thr Val	305	310	315
Arg Cys Leu Glu Ala Glu Val		320		

<210> 202  
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 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 202  
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<210> 203  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 203  
 gtcagtgaca gtacctactc gg 22

<210> 204  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

P1618P2C3 sequence listing.txt

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<220>
<223> Synthetic Oligonucleotide Probe

<400> 204
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<210> 205
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<220>
<223> Synthetic Oligonucleotide Probe

<400> 205
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<211> 1620
<212> DNA
<213> Homo Sapien

<220>
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<222> 973, 977, 996, 1003
<223> unknown base

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    ctttcacgat ggctcgccca acctactac cttctgtcgg ccctgctctc 100
    tgctgccttc ctactcgtga ggaaactgcc gccgctctgc cacggtctgc 150
    ccaccaacg cgaagacggg aaccctgtgt actttgactg gagagaagtg 200
    gagatcctga tgtttctcag tgccattgtg atgatgaaga accgcagatc 250
    catcactgtg gagcaacata taggcaacat tttcatgttt agtaaagtgg 300
    ccaacacaat tcttttcttc cgcttggata ttcgcatggg cctactttac 350
    atcacactct gcatagtgtt cctgatgacg tgcaaacccc ccctatatat 400
    gggccctgag tatatcaagt acttcaatga taaaaccatt gatgaggaac 450
    tagaacggga caagaggggc acttggattg tggagttctt tgccaattgg 500
    tctaatagact gccaatcatt tgcccctatc tatgctgacc tctcccttaa 550
    atacaactgt acagggctaa attttgggaa ggtggatggt ggacgctata 600
    ctgatgttag tacgcggtac aaagttagca catcacccct caccaagcaa 650
    ctccctaccc tgatcctgtt ccaaggtggc aaggaggcaa tgcggcggcc 700
    acagattgac aagaaaggac gggctgtctc atggaccttc tctgaggaga 750
    atgtgatccg agaatttaac ttaaatgagc tataccagcg ggccaagaaa 800
    ctatcaaagg ctggagacaa tatccctgag gagcagcctg tggcttcaac 850

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P1618P2C3 sequence listing.txt

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 caagcctgag gctgcagcct ttnattnatg ttttcccttt ggctgngact 1000  
 ggntggggca gcatgcagct tctgatttta aagaggcatc tagggaattg 1050  
 tcaggcaccc tacaggaagg cctgccatgc tgtggccaac tgtttactg 1100  
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 tttctccatg aaactctgtg gtttcatcat tccttcttag ttgacctgca 1250  
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 aacgctaaga attttcccc aaggactctt gcttccttaa gcccttctgg 1350  
 cttcgtttat ggtcttcatt aaaagtataa gcctaacttt gtcgctagtc 1400  
 ctaaggagaa acctttaacc acaaagtttt tatcattgaa gacaatattg 1450  
 aacaaccccc tattttgtgg ggattgagaa ggggtgaata gaggcttgag 1500  
 actttccttt gtgtggtagg acttgaggga gaaatcccct ggactttcac 1550  
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 aagattggga tttccttttg 1620

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 <212> PRT  
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 Leu Leu Ser Ala Ala Phe Leu Leu Val Arg Lys Leu Pro Pro Leu 45  
 35 40 45  
 Cys His Gly Leu Pro Thr Gln Arg Glu Asp Gly Asn Pro Cys Asp 60  
 50 55 60  
 Phe Asp Trp Arg Glu Val Glu Ile Leu Met Phe Leu Ser Ala Ile 75  
 65 70 75  
 Val Met Met Lys Asn Arg Arg Ser Ile Thr Val Glu Gln His Ile 90  
 80 85 90  
 Gly Asn Ile Phe Met Phe Ser Lys Val Ala Asn Thr Ile Leu Phe 105  
 95 100 105  
 Phe Arg Leu Asp Ile Arg Met Gly Leu Leu Tyr Ile Thr Leu Cys 120  
 110 115 120  
 Ile Val Phe Leu Met Thr Cys Lys Pro Pro Leu Tyr Met Gly Pro

P1618P2C3 sequence listing.txt

125		130		135
Glu Tyr Ile Lys	Tyr Phe Asn Asp Lys	Thr Ile Asp Glu Glu	Leu	
	140	145	150	
Glu Arg Asp Lys	Arg Val Thr Trp Ile	Val Glu Phe Phe Ala	Asn	
	155	160	165	
Trp Ser Asn Asp	Cys Gln Ser Phe Ala	Pro Ile Tyr Ala Asp	Leu	
	170	175	180	
Ser Leu Lys Tyr	Asn Cys Thr Gly Leu	Asn Phe Gly Lys Val	Asp	
	185	190	195	
Val Gly Arg Tyr	Thr Asp Val Ser Thr	Arg Tyr Lys Val Ser	Thr	
	200	205	210	
Ser Pro Leu Thr	Lys Gln Leu Pro Thr	Leu Ile Leu Phe Gln	Gly	
	215	220	225	
Gly Lys Glu Ala	Met Arg Arg Pro Gln	Ile Asp Lys Lys Gly	Arg	
	230	235	240	
Ala Val Ser Trp	Thr Phe Ser Glu Glu	Asn Val Ile Arg Glu	Phe	
	245	250	255	
Asn Leu Asn Glu	Leu Tyr Gln Arg Ala	Lys Lys Leu Ser Lys	Ala	
	260	265	270	
Gly Asp Asn Ile	Pro Glu Glu Gln Pro	Val Ala Ser Thr Pro	Thr	
	275	280	285	
Thr Val Ser Asp	Gly Glu Asn Lys Lys	Asp Lys		
	290	295		

<210> 208

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 208

gcttggatat tcgcatgggc ctac 24

<210> 209

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 209

tggagacaat atccctgagg 20

<210> 210

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

P1618P2C3 sequence listing.txt

<223> Synthetic Oligonucleotide Probe

<400> 210

aacagttggc cacagcatgg cagg 24

<210> 211

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 211

ccattgatga ggaactagaa cgggacaaga gggtcacttg gattgtggag 50

<210> 212

<211> 1985

<212> DNA

<213> Homo Sapien

<400> 212

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 acgtttgccc tggggcccca gcctggcccg ggtcaccctg gcatgaggag 100  
 atgggcctgt tgctcctggt cccattgctc ctgctgccc gctcctacgg 150  
 actgcccttc tacaacggct tctactactc caacagcgcc aacgaccaga 200  
 acctaggcaa cgggcatggc aaagacctcc ttaatggagt gaagctggtg 250  
 gtggagacac ccgaggagac cctgttcacc taccaagggg ccagtgtgat 300  
 cctgccctgc cgctaccgct acgagccggc cctgggtctcc ccgcggcgtg 350  
 tgcgtgtcaa atggtggaag ctgtcggaga acggggcccc agagaaggac 400  
 gtgctggtgg ccatcgggct gaggcaccgc tcctttgggg actaccaagg 450  
 ccgcgtgcac ctgcggcagg acaaagagca tgacgtctcg ctggagatcc 500  
 aggatctgcg gctggaggac tatgggcgtt accgctgtga ggtcattgac 550  
 gggctggagg atgaaagcgg tctggtggag ctggagctgc ggggtgtggt 600  
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 ggtgtactac ctggagcacc ctgagaagct gacgctgaca gaggcaaggg 950  
 aggcccgcca ggaagatgat gccacgatcg ccaaggtggg acagctcttt 1000  
 gccgcctgga agttccatgg cctggaccgc tgcgacgctg gctggctggc 1050

P1618P2C3 sequence listing.txt

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agatggcagc gtccgctacc ctgtggttca cccgcatcct aactgtgggc 1100
ccccagagcc tgggggtccga agctttggct tccccgaccc gcagagccgc 1150
ttgtacggtg tttactgcta ccgccagcac taggacctgg ggccctcccc 1200
tgccgcattc cctcactggc tgtgtattta ttgagtgggt cgttttccct 1250
tgtgggttgg agccatttta actgttttta tacttctcaa tttaaatttt 1300
ctttaaacat ttttttacta ttttttgtaa agcaaacaga acccaatgcc 1350
tccctttgct cctggatgcc cactccagg aatcatgctt gctcccctgg 1400
gccatttgcg gttttgtggg cttctggagg gttccccgcc atccaggctg 1450
gtctccctcc cttaaggagg ttggtgcccc gagtgggagg tggcctgtct 1500
agaatgccgc cgaggagtcg ggcatgggtg gcacagtctt ccctgcccct 1550
cagcctgggg gaagaagagg gcctcggggg cctccggagc tgggctttgg 1600
gcctctcctg cccacctcta cttctctgtg aagccgctga cccagtcctg 1650
cccactgagg ggctagggct ggaagccagt tctaggcttc caggcgaaat 1700
ctgaggggaag gaagaaactc ccctccccgt tccccttccc ctctcggttc 1750
caaagaatct gttttgttgt catttgtttc tcctgtttcc ctgtgtgggg 1800
aggggccctc aggtgtgtgt actttggaca ataaatggtg ctatgactgc 1850
cttccgccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1900
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1950
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 1985

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<210> 213
<211> 360
<212> PRT
<213> Homo Sapien

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<400> 213
Met Gly Leu Leu Leu Leu Val Pro Leu Leu Leu Pro Gly Ser
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Tyr Gly Leu Pro Phe Tyr Asn Gly Phe Tyr Tyr Ser Asn Ser Ala
          20          25          30
Asn Asp Gln Asn Leu Gly Asn Gly His Gly Lys Asp Leu Leu Asn
          35          40          45
Gly Val Lys Leu Val Val Glu Thr Pro Glu Glu Thr Leu Phe Thr
          50          55          60
Tyr Gln Gly Ala Ser Val Ile Leu Pro Cys Arg Tyr Arg Tyr Glu
          65          70          75
Pro Ala Leu Val Ser Pro Arg Arg Val Arg Val Lys Trp Trp Lys
          80          85          90

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P1618P2C3 sequence listing.txt

Leu Ser Glu Asn Gly	Ala Pro Glu Lys Asp Val Leu Val Ala Ile	95	100	105
Gly Leu Arg His Arg	Ser Phe Gly Asp Tyr Gln Gly Arg Val His	110	115	120
Leu Arg Gln Asp Lys	Glu His Asp Val Ser Leu Glu Ile Gln Asp	125	130	135
Leu Arg Leu Glu Asp	Tyr Gly Arg Tyr Arg Cys Glu Val Ile Asp	140	145	150
Gly Leu Glu Asp Glu	Ser Gly Leu Val Glu Leu Glu Leu Arg Gly	155	160	165
Val Val Phe Pro Tyr	Gln Ser Pro Asn Gly Arg Tyr Gln Phe Asn	170	175	180
Phe His Glu Gly Gln	Gln Val Cys Ala Glu Gln Ala Ala Val Val	185	190	195
Ala Ser Phe Glu Gln	Leu Phe Arg Ala Trp Glu Glu Gly Leu Asp	200	205	210
Trp Cys Asn Ala Gly	Trp Leu Gln Asp Ala Thr Val Gln Tyr Pro	215	220	225
Ile Met Leu Pro Arg	Gln Pro Cys Gly Gly Pro Gly Leu Ala Pro	230	235	240
Gly Val Arg Ser Tyr	Gly Pro Arg His Arg Arg Leu His Arg Tyr	245	250	255
Asp Val Phe Cys Phe	Ala Thr Ala Leu Lys Gly Arg Val Tyr Tyr	260	265	270
Leu Glu His Pro Glu	Lys Leu Thr Leu Thr Glu Ala Arg Glu Ala	275	280	285
Cys Gln Glu Asp Asp	Ala Thr Ile Ala Lys Val Gly Gln Leu Phe	290	295	300
Ala Ala Trp Lys Phe	His Gly Leu Asp Arg Cys Asp Ala Gly Trp	305	310	315
Leu Ala Asp Gly Ser	Val Arg Tyr Pro Val Val His Pro His Pro	320	325	330
Asn Cys Gly Pro Pro	Glu Pro Gly Val Arg Ser Phe Gly Phe Pro	335	340	345
Asp Pro Gln Ser Arg	Leu Tyr Gly Val Tyr Cys Tyr Arg Gln His	350	355	360

<210> 214

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 214



P1618P2C3 sequence listing.txt

tgcttcgcta ctgccctc 18

<210> 215  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 215  
ttcccttggtg ggttgag 18

<210> 216  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 216  
agggtggaa gccagttc 18

<210> 217  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 217  
agccagtgtg gaaatgcg 18

<210> 218  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 218  
tgtccaaagt acacacacct gagg 24

<210> 219  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 219  
gatgccacga tcgccaaggt gggacagctc tttgccgcct ggaag 45

<210> 220  
<211> 1503  
<212> DNA  
<213> Homo Sapien

<400> 220

P1618P2C3 sequence listing.txt

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ggagagcgga gcgaagctgg ataacagggg accgatgatg tggcgaccat 50
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tccccagacg caggccctca tggccagggg aggggtgcacc aggcggcccc 150
cctgagcgac gctccccatg atgacgcca cgggaacttc cagtacgacc 200
atgaggcttt cctgggacgg gaagtggcca aggaattcga ccaactcacc 250
ccagaggaaa gccaggcccg tctggggcgg atcgtggacc gcatggaccg 300
cgcgggggac ggcgacggct ggggtgtcgt ggccgagctt cgcgcggtga 350
tcgcgcacac gcagcagcgg cacatacggg actcggtgag cgcggcctgg 400
gacacgtacg acacggaccg cgacgggcgt gtgggttggg aggagctgcg 450
caacgccacc tatggccact acgcgcccgg tgaagaattt catgacgtgg 500
aggatgcaga gacctacaaa aagatgctgg ctcgggacga gcggcgtttc 550
cgggtggccg accaggatgg ggactcgatg gccactcgag aggagctgac 600
agccttcctg caccgccagg agttccctca catgcgggac atcgtgattg 650
ctgaaaccct ggaggacctg gacagaaaca aagatggcta tgtccaggtg 700
gaggagtaca tcgcggatct gtactcagcc gagcctgggg aggaggagcc 750
ggcgtgggtg cagacggaga ggcagcagtt ccgggacttc cgggatctga 800
acaaggatgg gcacctggat gggagtgagg tggggcactg ggtgctgccc 850
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ggaacatgtt tgtgggcagt caggccacca actatggcga ggacctgacc 1000
cggcaccacg atgagctgtg agcaccgcgc acctgccaca gcctcagagg 1050
cccgcaaat gaccggagga ggggccgctg tggctctggcc ccctccctgt 1100
ccaggccccg caggaggcag atgcagtccc aggcatectc ctgcccctgg 1150
gctctcaggg accccctggg tcggcttctg tccctgtcac accccaacc 1200
ccaggagggg gctgtcatag tcccagagga taagcaatac ctatttctga 1250
ctgagtctcc cagcccagac ccagggaccc ttggcccaa gctcagctct 1300
aagaaccgcc ccaaccctc cagctccaaa tctgagcctc caccacatag 1350
actgaaactc ccctggcccc agccctctcc tgcctggcct ggctggggac 1400
acctcctctc tgccaggagg caataaaagc cagcgccggg accttgaaaa 1450
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1500
aaa 1503

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P1618P2C3 sequence listing.txt

<211> 328

<212> PRT

<213> Homo Sapien

<400> 221

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Met Met Trp Arg Pro Ser Val Leu Leu Leu Leu Leu Leu Arg
 1          5          10          15
His Gly Ala Gln Gly Lys Pro Ser Pro Asp Ala Gly Pro His Gly
          20          25          30
Gln Gly Arg Val His Gln Ala Ala Pro Leu Ser Asp Ala Pro His
          35          40          45
Asp Asp Ala His Gly Asn Phe Gln Tyr Asp His Glu Ala Phe Leu
          50          55          60
Gly Arg Glu Val Ala Lys Glu Phe Asp Gln Leu Thr Pro Glu Glu
          65          70          75
Ser Gln Ala Arg Leu Gly Arg Ile Val Asp Arg Met Asp Arg Ala
          80          85          90
Gly Asp Gly Asp Gly Trp Val Ser Leu Ala Glu Leu Arg Ala Trp
          95          100          105
Ile Ala His Thr Gln Gln Arg His Ile Arg Asp Ser Val Ser Ala
          110          115          120
Ala Trp Asp Thr Tyr Asp Thr Asp Arg Asp Gly Arg Val Gly Trp
          125          130          135
Glu Glu Leu Arg Asn Ala Thr Tyr Gly His Tyr Ala Pro Gly Glu
          140          145          150
Glu Phe His Asp Val Glu Asp Ala Glu Thr Tyr Lys Lys Met Leu
          155          160          165
Ala Arg Asp Glu Arg Arg Phe Arg Val Ala Asp Gln Asp Gly Asp
          170          175          180
Ser Met Ala Thr Arg Glu Glu Leu Thr Ala Phe Leu His Pro Glu
          185          190          195
Glu Phe Pro His Met Arg Asp Ile Val Ile Ala Glu Thr Leu Glu
          200          205          210
Asp Leu Asp Arg Asn Lys Asp Gly Tyr Val Gln Val Glu Glu Tyr
          215          220          225
Ile Ala Asp Leu Tyr Ser Ala Glu Pro Gly Glu Glu Glu Pro Ala
          230          235          240
Trp Val Gln Thr Glu Arg Gln Gln Phe Arg Asp Phe Arg Asp Leu
          245          250          255
Asn Lys Asp Gly His Leu Asp Gly Ser Glu Val Gly His Trp Val
          260          265          270
Leu Pro Pro Ala Gln Asp Gln Pro Leu Val Glu Ala Asn His Leu
          275          280          285
Leu His Glu Ser Asp Thr Asp Lys Asp Gly Arg Leu Ser Lys Ala

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P1618P2C3 sequence listing.txt  
290 295 300

Glu Ile Leu Gly Asn Trp Asn Met Phe Val Gly Ser Gln Ala Thr  
305 310 315

Asn Tyr Gly Glu Asp Leu Thr Arg His His Asp Glu Leu  
320 325

<210> 222  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 222  
cgcaggccct catggccagg 20

<210> 223  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 223  
gaaatcctgg gtaattgg 18

<210> 224  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 224  
gtgcgcggtg ctcaagctc atc 23

<210> 225  
<211> 44  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 225  
ccccctgag cgacgtccc ccatgatgac gcccacggga actt 44

<210> 226  
<211> 2403  
<212> DNA  
<213> Homo Sapien

<400> 226  
ggggccttgc cttccgact cgggcgcagc cgggtggatc tcgagcaggt 50  
gcggagcccc gggcggcggg cgcgggtgag agggatccct gacgcctctg 100  
tccctgtttc ttgtcgctc ccagcctgac tgctcgctt ttggcgcccc 150  
Page 140

P1618P2C3 sequence listing.txt

cgctccccg cggcgccggg ttgcacaccg atcctgggct tcgctcgatt 200  
 tgccgccgag gcgcctccca gacctagagg ggcgctggcc tggagcagcg 250  
 ggtcgtctgt gtcctctctc ctctgcgccg cgcccgggga tccgaagggt 300  
 gcggggctct gaggaggtga cgcgcggggc ctcccgcacc ctggccttgc 350  
 ccgcattctc cctctctccc aggtgtgagc agcctatcag tcaccatgtc 400  
 cgcagcctgg atcccggctc tcggcctcgg tgtgtgtctg ctgctgctgc 450  
 cggggcccg cggcagcgag ggagccgctc ccattgctat cacatgtttt 500  
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 gggctgccct cttgaggaat tctctgtgta tgggaacata gtatatgctt 600  
 ctgtatcgag catatgtggg gctgctgtcc acaggggagt aatcagcaac 650  
 tcagggggac ctgtacgagt ctatagccta cctggtcgag aaaactattc 700  
 ctcatagat gccaatggca tccagtctca aatgctttct agatggctctg 750  
 cttctttcac agtaactaaa ggcaaaagta gtacacagga ggccacagga 800  
 caagcagtg ccacagcaca tccaccaaca ggtaaacgac taaagaaaac 850  
 acccgagaag aaaactggca ataaagattg taaagcagac attgcatttc 900  
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 aattttgttg gaaaagtggc tctaattgtg ggaattggaa cagaaggacc 1000  
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 ggtttcagag ggggtaattc caatacagga aaagccttga agcatactgc 1150  
 tcagaaattc ttcacggtag atgctggagt aagaaaaggg atccccaag 1200  
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 caagcctatc cctgaagaac tggggatggt tcaggatgtc acatttgttg 1350  
 acaaggctgt ctgtcggaat aatggcttct tctcttacca catgcccaac 1400  
 tggtttggca ccacaaaata cgtaaagcct ctggtacaga agctgtgcac 1450  
 tcatgaacaa atgatgtgca gcaagacctg ttataactca gtgaacattg 1500  
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 tgggtccaag atagctgctg tacagtttac ttatgatcag cgcacggagt 1650  
 tcagtttcac tgactatagc accaaagaga atgtcctagc tgtcatcaga 1700

P1618P2C3 sequence listing.txt

aacatccgct atatgagtgg tggaacagct actggtgatg ccatttcctt 1750  
 cactgttaga aatgtgtttg gccctataag ggagagcccc aacaagaact 1800  
 tcctagtaat tgtcacagat gggcagtcct atgatgatgt ccaaggccct 1850  
 gcagctgctg cacatgatgc aggaatcact atcttctctg ttggtgtggc 1900  
 ttgggcacct ctggatgacc tgaaagatat ggcttctaaa ccgaaggagt 1950  
 ctcacgcttt cttaCaaga gagttcacag gattagaacc aattgtttct 2000  
 gatgtcatca gaggcatttg tagagatttc ttagaatccc agcaataatg 2050  
 gtaacatttt gacaactgaa agaaaaagta caaggggatc cagtgtgtaa 2100  
 attgtattct cataatactg aaatgcttta gcatactaga atcagataca 2150  
 aaactattaa gtatgtcaac agccatttag gcaaataagc actcctttaa 2200  
 agccgctgcc ttctggttac aatttacagt gtactttggt aaaaacactg 2250  
 ctgaggcttc ataatcatgg ctcttagaaa ctcaggaaag aggagataat 2300  
 gtggattaaa accttaagag ttctaaccat gcctactaaa tgtacagata 2350  
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 aaa 2403

<210> 227

<211> 550

<212> PRT

<213> Homo Sapien

<400> 227

Met	Ser	Ala	Ala	Trp	Ile	Pro	Ala	Leu	Gly	Leu	Gly	Val	Cys	Leu
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Leu	Leu	Leu	Pro	Gly	Pro	Ala	Gly	Ser	Glu	Gly	Ala	Ala	Pro	Ile
			20						25					30
Ala	Ile	Thr	Cys	Phe	Thr	Arg	Gly	Leu	Asp	Ile	Arg	Lys	Glu	Lys
			35						40					45
Ala	Asp	Val	Leu	Cys	Pro	Gly	Gly	Cys	Pro	Leu	Glu	Glu	Phe	Ser
			50						55					60
Val	Tyr	Gly	Asn	Ile	Val	Tyr	Ala	Ser	Val	Ser	Ser	Ile	Cys	Gly
			65						70					75
Ala	Ala	Val	His	Arg	Gly	Val	Ile	Ser	Asn	Ser	Gly	Gly	Pro	Val
			80						85					90
Arg	Val	Tyr	Ser	Leu	Pro	Gly	Arg	Glu	Asn	Tyr	Ser	Ser	Val	Asp
			95						100					105
Ala	Asn	Gly	Ile	Gln	Ser	Gln	Met	Leu	Ser	Arg	Trp	Ser	Ala	Ser
			110						115					120
Phe	Thr	Val	Thr	Lys	Gly	Lys	Ser	Ser	Thr	Gln	Glu	Ala	Thr	Gly
			125						130					135

P1618P2C3 sequence listing.txt

Gln Ala Val Ser Thr	Ala His Pro Pro	Thr Gly Lys Arg Leu	Lys
140		145	150
Lys Thr Pro Glu	Lys Lys Thr Gly Asn	Lys Asp Cys Lys Ala	Asp
155		160	165
Ile Ala Phe Leu	Ile Asp Gly Ser Phe	Asn Ile Gly Gln Arg	Arg
170		175	180
Phe Asn Leu Gln	Lys Asn Phe Val Gly	Lys Val Ala Leu Met	Leu
185		190	195
Gly Ile Gly Thr	Glu Gly Pro His Val	Gly Leu Val Gln Ala	Ser
200		205	210
Glu His Pro Lys	Ile Glu Phe Tyr Leu	Lys Asn Phe Thr Ser	Ala
215		220	225
Lys Asp Val Leu	Phe Ala Ile Lys Glu	Val Gly Phe Arg Gly	Gly
230		235	240
Asn Ser Asn Thr	Gly Lys Ala Leu Lys	His Thr Ala Gln Lys	Phe
245		250	255
Phe Thr Val Asp	Ala Gly Val Arg Lys	Gly Ile Pro Lys Val	Val
260		265	270
Val Val Phe Ile	Asp Gly Trp Pro Ser	Asp Asp Ile Glu Glu	Ala
275		280	285
Gly Ile Val Ala	Arg Glu Phe Gly Val	Asn Val Phe Ile Val	Ser
290		295	300
Val Ala Lys Pro	Ile Pro Glu Glu Leu	Gly Met Val Gln Asp	Val
305		310	315
Thr Phe Val Asp	Lys Ala Val Cys Arg	Asn Asn Gly Phe Phe	Ser
320		325	330
Tyr His Met Pro	Asn Trp Phe Gly Thr	Thr Lys Tyr Val Lys	Pro
335		340	345
Leu Val Gln Lys	Leu Cys Thr His Glu	Gln Met Met Cys Ser	Lys
350		355	360
Thr Cys Tyr Asn	Ser Val Asn Ile Ala	Phe Leu Ile Asp Gly	Ser
365		370	375
Ser Ser Val Gly	Asp Ser Asn Phe Arg	Leu Met Leu Glu Phe	Val
380		385	390
Ser Asn Ile Ala	Lys Thr Phe Glu Ile	Ser Asp Ile Gly Ala	Lys
395		400	405
Ile Ala Ala Val	Gln Phe Thr Tyr Asp	Gln Arg Thr Glu Phe	Ser
410		415	420
Phe Thr Asp Tyr	Ser Thr Lys Glu Asn	Val Leu Ala Val Ile	Arg
425		430	435
Asn Ile Arg Tyr	Met Ser Gly Gly Thr	Ala Thr Gly Asp Ala	Ile
440		445	450

P1618P2C3 sequence listing.txt

Ser Phe Thr Val	Arg Asn Val Phe Gly	Pro Ile Arg Glu Ser	Pro
455	460	465	
Asn Lys Asn Phe	Leu Val Ile Val Thr	Asp Gly Gln Ser Tyr	Asp
470	475	480	
Asp Val Gln Gly	Pro Ala Ala Ala Ala	His Asp Ala Gly Ile	Thr
485	490	495	
Ile Phe Ser Val	Gly Val Ala Trp Ala	Pro Leu Asp Asp Leu	Lys
500	505	510	
Asp Met Ala Ser	Lys Pro Lys Glu Ser	His Ala Phe Phe Thr	Arg
515	520	525	
Glu Phe Thr Gly	Leu Glu Pro Ile Val	Ser Asp Val Ile Arg	Gly
530	535	540	
Ile Cys Arg Asp	Phe Leu Glu Ser Gln	Gln	
545	550		

<210> 228  
 <211> 18  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 228  
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<210> 229  
 <211> 18  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 229  
 ctgctgtcca caggggag 18

<210> 230  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 230  
 ccttgaagca tactgctc 18

<210> 231  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 231



P1618P2C3 sequence listing.txt

gagatagcaa tttccgcc 18

<210> 232  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 232  
 ttcctcaaga gggcagcc 18

<210> 233  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 233  
 cttggcacca atgtccgaga tttc 24

<210> 234  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 234  
 gctctgagga aggtgacgcg cggggcctcc gaacccttgg ccttg 45

<210> 235  
 <211> 2586  
 <212> DNA  
 <213> Homo Sapien

<400> 235  
 cgccgcgctc ccgcacccgc ggcccgccca ccgcgccgct cccgcatctg 50  
 caccgcagc ccggcggcct cccggcggga gcgagcagat ccagtccggc 100  
 ccgcagcgca actcgggtcca gtcggggcgg cggctgcggg cgcagagcgg 150  
 agatgcagcg gcttgggggc accctgctgt gcctgctgct ggcggcggcg 200  
 gtccccacgg ccccgcgcc cgctccgacg gcgacctcgg ctccagtcaa 250  
 gcccggcccc gctctcagct accgcagga ggaggccacc ctcaatgaga 300  
 tgttccgcga ggttgaggaa ctgatggagg acacgcagca caaattgcgc 350  
 agcgcggtgg aagagatgga ggcagaagaa gctgctgcta aagcatcatc 400  
 agaagtgaac ctggcaaaact tacctcccag ctatcacaat gagaccaaca 450  
 cagacacgaa ggttggaat aataccatcc atgtgcaccg agaaattcac 500  
 aagataacca acaaccagac tggacaaatg gtcttttcag agacagttat 550

P1618P2C3 sequence listing.txt

cacatctgtg ggagacgaag aaggcagaag gagccacgag tgcacatcg 600  
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 acctgccagc catgccgggg ccagaggatg ctctgcaccc gggacagtga 700  
 gtgctgtgga gaccagctgt gtgtctgggg tctactgcacc aaaatggcca 750  
 ccaggggcag caatgggacc atctgtgaca accagaggga ctgccagccg 800  
 gggctgtgct gtgccttcca gagaggcctg ctgttccctg tgtgcacacc 850  
 cctgcccgtg gagggcgagc tttgccatga ccccgccagc cggcttctgg 900  
 acctcatcac ctgggagcta gaggctgatg gaggcttgga ccgatgccct 950  
 tgtgccagtg gcctcctctg ccagccccac agccacagcc tgggtgtatgt 1000  
 gtgcaagccg accttcgtgg ggagccgtga ccaagatggg gagatcctgc 1050  
 tgcccagaga ggtccccgat gagtatgaag ttggcagctt catggaggag 1100  
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 catcttcttc ccagtaagtt tcccctctgg cttgacagca tgagggtgtg 1350  
 tgcatttgtt cagctcccc aggctgttct ccaggcttca cagtctggtg 1400  
 cttgggagag tcaggcaggg ttaaaactga ggagcagttt gccaccctg 1450  
 tccagattat tggctgcttt gcctctacca gttggcagac agccgtttgt 1500  
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 ctttccatgg gcataggtaa gctgtgcctt cagctgttgc agatgaaatg 1700  
 ttctgttcac cctgcattac atgtgtttat tcatccagca gtgttgctca 1750  
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 tctctcagca cagcctgggg aggggggtcat tgttctcctc gtccatcagg 1850  
 gatctcagag gctcagagac tgcaagctgc ttgccaagt cacacagcta 1900  
 gtgaagacca gagcagtttc atctggttgt gactctaagc tcagtgtctt 1950  
 ctccactacc ccacaccagc cttggtgcca ccaaaagtgc tccccaaaag 2000  
 gaaggagaat gggatttttc ttgaggcatg cacatctgga attaagggtca 2050  
 aactaattct cacatccctc taaaagtaaa ctactgttag gaacagcagt 2100  
 gttctcacag tgtggggcag ccgtccttct aatgaagaca atgatattga 2150

P1618P2C3 sequence listing.txt

cactgtccct ctttggcagt tgcattagta actttgaaag gtatatgact 2200  
gagcgtagca tacagggttaa cctgcagaaa cagtacttag gtaattgtag 2250  
ggcgaggatt ataaatgaaa ttgcaaaaat cacttagcag caactgaaga 2300  
caattatcaa ccacgtggag aaaatcaaac cgagcagggc tgtgtgaaac 2350  
atggttgtaa tatgcgactg cgaacactga actctacgcc actccacaaa 2400  
tgatgttttc aggtgtcatg gactgttgcc accatgtatt catccagagt 2450  
tcttaaagtt taaagttgca catgattgta taagcatgct ttctttgagt 2500  
tttaaattat gtataaacat aagttgcatt tagaaatcaa gcataaatca 2550  
cttcaactgc aaaaaaaaaa aaaaaaaaaa aaaaaa 2586

<210> 236

<211> 350

<212> PRT

<213> Homo Sapien

<400> 236

Met	Gln	Arg	Leu	Gly	Ala	Thr	Leu	Leu	Cys	Leu	Leu	Leu	Ala	Ala	1	5	10	15
Ala	Val	Pro	Thr	Ala	Pro	Ala	Pro	Ala	Pro	Thr	Ala	Thr	Ser	Ala	20	25	30	35
Pro	Val	Lys	Pro	Gly	Pro	Ala	Leu	Ser	Tyr	Pro	Gln	Glu	Glu	Ala	35	40	45	50
Thr	Leu	Asn	Glu	Met	Phe	Arg	Glu	Val	Glu	Glu	Leu	Met	Glu	Asp	50	55	60	65
Thr	Gln	His	Lys	Leu	Arg	Ser	Ala	Val	Glu	Glu	Met	Glu	Ala	Glu	65	70	75	80
Glu	Ala	Ala	Ala	Lys	Ala	Ser	Ser	Glu	Val	Asn	Leu	Ala	Asn	Leu	80	85	90	95
Pro	Pro	Ser	Tyr	His	Asn	Glu	Thr	Asn	Thr	Asp	Thr	Lys	Val	Gly	95	100	105	110
Asn	Asn	Thr	Ile	His	Val	His	Arg	Glu	Ile	His	Lys	Ile	Thr	Asn	110	115	120	125
Asn	Gln	Thr	Gly	Gln	Met	Val	Phe	Ser	Glu	Thr	Val	Ile	Thr	Ser	125	130	135	140
Val	Gly	Asp	Glu	Glu	Gly	Arg	Arg	Ser	His	Glu	Cys	Ile	Ile	Asp	140	145	150	155
Glu	Asp	Cys	Gly	Pro	Ser	Met	Tyr	Cys	Gln	Phe	Ala	Ser	Phe	Gln	155	160	165	170
Tyr	Thr	Cys	Gln	Pro	Cys	Arg	Gly	Gln	Arg	Met	Leu	Cys	Thr	Arg	170	175	180	185
Asp	Ser	Glu	Cys	Cys	Gly	Asp	Gln	Leu	Cys	Val	Trp	Gly	His	Cys	185	190	195	

P1618P2C3 sequence listing.txt

Thr	Lys	Met	Ala	Thr	Arg	Gly	Ser	Asn	Gly	Thr	Ile	Cys	Asp	Asn
				200					205					210
Gln	Arg	Asp	Cys	Gln	Pro	Gly	Leu	Cys	Cys	Ala	Phe	Gln	Arg	Gly
				215					220					225
Leu	Leu	Phe	Pro	Val	Cys	Thr	Pro	Leu	Pro	Val	Glu	Gly	Glu	Leu
				230					235					240
Cys	His	Asp	Pro	Ala	Ser	Arg	Leu	Leu	Asp	Leu	Ile	Thr	Trp	Glu
				245					250					255
Leu	Glu	Pro	Asp	Gly	Ala	Leu	Asp	Arg	Cys	Pro	Cys	Ala	Ser	Gly
				260					265					270
Leu	Leu	Cys	Gln	Pro	His	Ser	His	Ser	Leu	Val	Tyr	Val	Cys	Lys
				275					280					285
Pro	Thr	Phe	Val	Gly	Ser	Arg	Asp	Gln	Asp	Gly	Glu	Ile	Leu	Leu
				290					295					300
Pro	Arg	Glu	Val	Pro	Asp	Glu	Tyr	Glu	Val	Gly	Ser	Phe	Met	Glu
				305					310					315
Glu	Val	Arg	Gln	Glu	Leu	Glu	Asp	Leu	Glu	Arg	Ser	Leu	Thr	Glu
				320					325					330
Glu	Met	Ala	Leu	Gly	Glu	Pro	Ala	Ala	Ala	Ala	Ala	Ala	Leu	Leu
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Gly	Gly	Glu	Glu	Ile										
				350										

<210> 237

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 237

ggagctgcac cccttgc 17

<210> 238

<211> 49

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 238

ggaggactgt gccaccatga gagactcttc aaaccaagg caaaattgg 49

<210> 239

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

P1618P2C3 sequence listing.txt

<400> 239  
gcagagcggg gatgcagcgg cttg 24

<210> 240  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 240  
ttggcagctt catggagg 18

<210> 241  
<211> 18  
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<220>  
<223> Synthetic Oligonucleotide Probe

<400> 241  
cctgggcaaa aatgcaac 18

<210> 242  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 242  
ctccagctcc tggcgacac cctc 24

<210> 243  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 243  
ggctctcagc taccgcgcag gagcgaggcc accctcaatg agatg 45

<210> 244  
<211> 3679  
<212> DNA  
<213> Homo Sapien

<400> 244  
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cactctcctt ccttcccaa cacacatgtg catgtacaca cacacataca 150  
cacacataca ccttctctc cttcactgaa gactcacagt cactcactct 200  
gtgagcaggt catagaaaag gacactaaag ccttaaggac aggcctggcc 250

P1618P2C3 sequence listing.txt

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 agaaaccccc atctctacta aaaatacaaa aattagccag gagtgggtggc 450  
 aggtgcctgt aatcccagct actcaggtgg ctgagccagg agaatcgctt 500  
 gaatccagga ggcggaggat gcagtcagct gagtgcaccg ctgcactcca 550  
 gcctgggtga cagaatgaga ctctgtctca aacaaacaaa cacgggagga 600  
 ggggtagata ctgcttctct gcaacctcct taactctgca tcctcttctt 650  
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 agaggacaag gaagagaagg catattgagg agggcaagaa gtgacgcccg 750  
 gtgtagaatg actgccctgg gaggttggtt ccttggggcc tggcagggtt 800  
 gctgaccctt accctgcaaa acacaaagag caggactcca gactctcctt 850  
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 agcgggtagg gccgggggac tttgccaaca tgctgcacct taaggagctg 1750  
 ggactgaaca acatggagga gctggtctcc atcgacaagt ttgccctggt 1800

P1618P2C3 sequence listing.txt

gaacctcccc gagctgacca agctggacat caccaataac ccacggctgt 1850  
 ctttcatcca cccccgcgcc ttccaccacc tgccccagat ggagaccctc 1900  
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 actgtgtcat ccgctgggcc aatgccacgg gcacccgtgt ccgcttcac 2050  
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 aatccaggga ggaagctgcc cagatcctca gaaggggaga cactgttgcc 3000  
 accattgtct caaaattctt gaagctcagc ctgttctcag cagtagagaa 3050  
 atcactagga ctacttttta ccaaaagaga agcagtctgg gccagatgcc 3100  
 ctgccaggaa agggacatgg acccacgtgc ttgaggcctg gcagctgggc 3150  
 caagacagat ggggctttgt ggccctgggg gtgcttctgc agccttgaaa 3200  
 aagttgccct tacctcctag ggtcacctct gctgccattc tgaggaacat 3250  
 ctccaaggaa caggagggac tttggctaga gcctcctgcc tccccatctt 3300  
 ctctctgccc agaggctcct gggcctggct tggctgtccc ctacctgtgt 3350  
 ccccgggctg cacccttcc tcttctctt ctctgtacag tctcagttgc 3400

P1618P2C3 sequence listing.txt

ttgctcttgt gcctcctggg caagggctga aggaggccac tccatctcac 3450  
ctcggggggc tgccctcaat gtgggagtga cccagccag atctgaagga 3500  
catttgggag agggatgccc aggaacgcct catctcagca gcctgggctc 3550  
ggcattccga agctgacttt ctataggcaa ttttgtacct ttgtggagaa 3600  
atgtgtcacc tcccccaacc cgattcactc ttttctctg ttttgtaaaa 3650  
aataaaaata aataataaca ataaaaaaa 3679

<210> 245

<211> 713

<212> PRT

<213> Homo Sapien

<400> 245

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Ala	Thr	Ala	Thr	Val	Pro	Val	Val	Pro	Trp	His	Val	Pro	Cys	Pro	20	25	30	
Pro	Gln	Cys	Ala	Cys	Gln	Ile	Arg	Pro	Trp	Tyr	Thr	Pro	Arg	Ser	35	40	45	
Ser	Tyr	Arg	Glu	Ala	Thr	Thr	Val	Asp	Cys	Asn	Asp	Leu	Phe	Leu	50	55	60	
Thr	Ala	Val	Pro	Pro	Ala	Leu	Pro	Ala	Gly	Thr	Gln	Thr	Leu	Leu	65	70	75	
Leu	Gln	Ser	Asn	Ser	Ile	Val	Arg	Val	Asp	Gln	Ser	Glu	Leu	Gly	80	85	90	
Tyr	Leu	Ala	Asn	Leu	Thr	Glu	Leu	Asp	Leu	Ser	Gln	Asn	Ser	Phe	95	100	105	
Ser	Asp	Ala	Arg	Asp	Cys	Asp	Phe	His	Ala	Leu	Pro	Gln	Leu	Leu	110	115	120	
Ser	Leu	His	Leu	Glu	Glu	Asn	Gln	Leu	Thr	Arg	Leu	Glu	Asp	His	125	130	135	
Ser	Phe	Ala	Gly	Leu	Ala	Ser	Leu	Gln	Glu	Leu	Tyr	Leu	Asn	His	140	145	150	
Asn	Gln	Leu	Tyr	Arg	Ile	Ala	Pro	Arg	Ala	Phe	Ser	Gly	Leu	Ser	155	160	165	
Asn	Leu	Leu	Arg	Leu	His	Leu	Asn	Ser	Asn	Leu	Leu	Arg	Ala	Ile	170	175	180	
Asp	Ser	Arg	Trp	Phe	Glu	Met	Leu	Pro	Asn	Leu	Glu	Ile	Leu	Met	185	190	195	
Ile	Gly	Gly	Asn	Lys	Val	Asp	Ala	Ile	Leu	Asp	Met	Asn	Phe	Arg	200	205	210	
Pro	Leu	Ala	Asn	Leu	Arg	Ser	Leu	Val	Leu	Ala	Gly	Met	Asn	Leu	215	220	225	



P1618P2C3 sequence listing.txt

Arg	Glu	Ile	Ser	Asp	Tyr	Ala	Leu	Glu	Gly	Leu	Gln	Ser	Leu	Glu	230	235	240
Ser	Leu	Ser	Phe	Tyr	Asp	Asn	Gln	Leu	Ala	Arg	Val	Pro	Arg	Arg	245	250	255
Ala	Leu	Glu	Gln	Val	Pro	Gly	Leu	Lys	Phe	Leu	Asp	Leu	Asn	Lys	260	265	270
Asn	Pro	Leu	Gln	Arg	Val	Gly	Pro	Gly	Asp	Phe	Ala	Asn	Met	Leu	275	280	285
His	Leu	Lys	Glu	Leu	Gly	Leu	Asn	Asn	Met	Glu	Glu	Leu	Val	Ser	290	295	300
Ile	Asp	Lys	Phe	Ala	Leu	Val	Asn	Leu	Pro	Glu	Leu	Thr	Lys	Leu	305	310	315
Asp	Ile	Thr	Asn	Asn	Pro	Arg	Leu	Ser	Phe	Ile	His	Pro	Arg	Ala	320	325	330
Phe	His	His	Leu	Pro	Gln	Met	Glu	Thr	Leu	Met	Leu	Asn	Asn	Asn	335	340	345
Ala	Leu	Ser	Ala	Leu	His	Gln	Gln	Thr	Val	Glu	Ser	Leu	Pro	Asn	350	355	360
Leu	Gln	Glu	Val	Gly	Leu	His	Gly	Asn	Pro	Ile	Arg	Cys	Asp	Cys	365	370	375
Val	Ile	Arg	Trp	Ala	Asn	Ala	Thr	Gly	Thr	Arg	Val	Arg	Phe	Ile	380	385	390
Glu	Pro	Gln	Ser	Thr	Leu	Cys	Ala	Glu	Pro	Pro	Asp	Leu	Gln	Arg	395	400	405
Leu	Pro	Val	Arg	Glu	Val	Pro	Phe	Arg	Glu	Met	Thr	Asp	His	Cys	410	415	420
Leu	Pro	Leu	Ile	Ser	Pro	Arg	Ser	Phe	Pro	Pro	Ser	Leu	Gln	Val	425	430	435
Ala	Ser	Gly	Glu	Ser	Met	Val	Leu	His	Cys	Arg	Ala	Leu	Ala	Glu	440	445	450
Pro	Glu	Pro	Glu	Ile	Tyr	Trp	Val	Thr	Pro	Ala	Gly	Leu	Arg	Leu	455	460	465
Thr	Pro	Ala	His	Ala	Gly	Arg	Arg	Tyr	Arg	Val	Tyr	Pro	Glu	Gly	470	475	480
Thr	Leu	Glu	Leu	Arg	Arg	Val	Thr	Ala	Glu	Glu	Ala	Gly	Leu	Tyr	485	490	495
Thr	Cys	Val	Ala	Gln	Asn	Leu	Val	Gly	Ala	Asp	Thr	Lys	Thr	Val	500	505	510
Ser	Val	Val	Val	Gly	Arg	Ala	Leu	Leu	Gln	Pro	Gly	Arg	Asp	Glu	515	520	525
Gly	Gln	Gly	Leu	Glu	Leu	Arg	Val	Gln	Glu	Thr	His	Pro	Tyr	His	530	535	540

P1618P2C3 sequence listing.txt

Ile	Leu	Leu	Ser	Trp	Val	Thr	Pro	Pro	Asn	Thr	Val	Ser	Thr	Asn
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Leu	Thr	Trp	Ser	Ser	Ala	Ser	Ser	Leu	Arg	Gly	Gln	Gly	Ala	Thr
				560					565					570
Ala	Leu	Ala	Arg	Leu	Pro	Arg	Gly	Thr	His	Ser	Tyr	Asn	Ile	Thr
				575					580					585
Arg	Leu	Leu	Gln	Ala	Thr	Glu	Tyr	Trp	Ala	Cys	Leu	Gln	Val	Ala
				590					595					600
Phe	Ala	Asp	Ala	His	Thr	Gln	Leu	Ala	Cys	Val	Trp	Ala	Arg	Thr
				605					610					615
Lys	Glu	Ala	Thr	Ser	Cys	His	Arg	Ala	Leu	Gly	Asp	Arg	Pro	Gly
				620					625					630
Leu	Ile	Ala	Ile	Leu	Ala	Leu	Ala	Val	Leu	Leu	Leu	Ala	Ala	Gly
				635					640					645
Leu	Ala	Ala	His	Leu	Gly	Thr	Gly	Gln	Pro	Arg	Lys	Gly	Val	Gly
				650					655					660
Gly	Arg	Arg	Pro	Leu	Pro	Pro	Ala	Trp	Ala	Phe	Trp	Gly	Trp	Ser
				665					670					675
Ala	Pro	Ser	Val	Arg	Val	Val	Ser	Ala	Pro	Leu	Val	Leu	Pro	Trp
				680					685					690
Asn	Pro	Gly	Arg	Lys	Leu	Pro	Arg	Ser	Ser	Glu	Gly	Glu	Thr	Leu
				695					700					705
Leu	Pro	Pro	Leu	Ser	Gln	Asn	Ser							
				710										

<210> 246

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 246

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<210> 247

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 247

aaacttgctg atggagacca gctc 24

<210> 248

<211> 45

<212> DNA

<213> Artificial Sequence

P1618P2C3 sequence listing.txt

<220>

<223> Synthetic Oligonucleotide Probe

<400> 248

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<210> 249

<211> 3401

<212> DNA

<213> Homo Sapien

<400> 249

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 catcaagttc gacgtggact gcaccgtgga cattgagagc ctgacgggct 200  
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 cgggctgcgg gagctcaaac gcctcaaggt gctgcggctc aagagcaacc 950  
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 aaggacaaca acctcaagac catcgaggag atcatcagct tccagcacct 1200  
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P1618P2C3 sequence listing.txt

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gcctcctgca gaacctccag aacctagcca tcacggccaa ccggatcgag 1450  
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tctggagctg ccaaggaggg aggagactcg gggttgctaa tccccggatg 2800  
aacggtgctc cattcgcacc tcccctcctc gtgcctgccc tgcctctcca 2850

P1618P2C3 sequence listing.txt

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<210> 250  
 <211> 546  
 <212> PRT  
 <213> Homo Sapien

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 20 25 30  
 Cys Thr Val Asp Ile Glu Ser Leu Thr Gly Tyr Arg Thr Tyr Arg  
 35 40 45  
 Cys Ala His Pro Leu Ala Thr Leu Phe Lys Ile Leu Ala Ser Phe  
 50 55 60  
 Tyr Ile Ser Leu Val Ile Phe Tyr Gly Leu Ile Cys Met Tyr Thr  
 65 70 75  
 Leu Trp Trp Met Leu Arg Arg Ser Leu Lys Lys Tyr Ser Phe Glu  
 80 85 90  
 Ser Ile Arg Glu Glu Ser Ser Tyr Ser Asp Ile Pro Asp Val Lys  
 95 100 105  
 Asn Asp Phe Ala Phe Met Leu His Leu Ile Asp Gln Tyr Asp Pro  
 110 115 120  
 Leu Tyr Ser Lys Arg Phe Ala Val Phe Leu Ser Glu Val Ser Glu  
 125 130 135  
 Asn Lys Leu Arg Gln Leu Asn Leu Asn Asn Glu Trp Thr Leu Asp  
 140 145 150  
 Lys Leu Arg Gln Arg Leu Thr Lys Asn Ala Gln Asp Lys Leu Glu  
 155 160 165

P1618P2C3 sequence listing.txt

Leu His Leu Phe	Met 170	Leu Ser Gly Ile	Pro 175	Asp Thr Val Phe	Asp 180
Leu Val Glu Leu	Glu 185	Val Leu Lys Leu	Glu 190	Leu Ile Pro Asp	Val 195
Thr Ile Pro Pro	Ser 200	Ile Ala Gln Leu	Thr 205	Gly Leu Lys Glu	Leu 210
Trp Leu Tyr His	Thr 215	Ala Ala Lys Ile	Glu 220	Ala Pro Ala Leu	Ala 225
Phe Leu Arg Glu	Asn 230	Leu Arg Ala Leu	His 235	Ile Lys Phe Thr	Asp 240
Ile Lys Glu Ile	Pro 245	Leu Trp Ile Tyr	Ser 250	Leu Lys Thr Leu	Glu 255
Glu Leu His Leu	Thr 260	Gly Asn Leu Ser	Ala 265	Glu Asn Asn Arg	Tyr 270
Ile Val Ile Asp	Gly 275	Leu Arg Glu Leu	Lys 280	Arg Leu Lys Val	Leu 285
Arg Leu Lys Ser	Asn 290	Leu Ser Lys Leu	Pro 295	Gln Val Val Thr	Asp 300
Val Gly Val His	Leu 305	Gln Lys Leu Ser	Ile 310	Asn Asn Glu Gly	Thr 315
Lys Leu Ile Val	Leu 320	Asn Ser Leu Lys	Lys 325	Met Ala Asn Leu	Thr 330
Glu Leu Glu Leu	Ile 335	Arg Cys Asp Leu	Glu 340	Arg Ile Pro His	Ser 345
Ile Phe Ser Leu	His 350	Asn Leu Gln Glu	Ile 355	Asp Leu Lys Asp	Asn 360
Asn Leu Lys Thr	Ile 365	Glu Glu Ile Ile	Ser 370	Phe Gln His Leu	His 375
Arg Leu Thr Cys	Leu 380	Lys Leu Trp Tyr	Asn 385	His Ile Ala Tyr	Ile 390
Pro Ile Gln Ile	Gly 395	Asn Leu Thr Asn	Leu 400	Glu Arg Leu Tyr	Leu 405
Asn Arg Asn Lys	Ile 410	Glu Lys Ile Pro	Thr 415	Gln Leu Phe Tyr	Cys 420
Arg Lys Leu Arg	Tyr 425	Leu Asp Leu Ser	His 430	Asn Asn Leu Thr	Phe 435
Leu Pro Ala Asp	Ile 440	Gly Leu Leu Gln	Asn 445	Leu Gln Asn Leu	Ala 450
Ile Thr Ala Asn	Arg 455	Ile Glu Thr Leu	Pro 460	Pro Glu Leu Phe	Gln 465
Cys Arg Lys Leu	Arg 470	Ala Leu His Leu	Gly 475	Asn Asn Val Leu	Gln 480

P1618P2C3 sequence listing.txt

Ser Leu Pro Ser Arg Val Gly Glu Leu Thr Asn Leu Thr Gln Ile  
485 490 495  
Glu Leu Arg Gly Asn Arg Leu Glu Cys Leu Pro Val Glu Leu Gly  
500 505 510  
Glu Cys Pro Leu Leu Lys Arg Ser Gly Leu Val Val Glu Glu Asp  
515 520 525  
Leu Phe Asn Thr Leu Pro Pro Glu Val Lys Glu Arg Leu Trp Arg  
530 535 540  
Ala Asp Lys Glu Gln Ala  
545

<210> 251  
<211> 20  
<212> DNA  
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<220>  
<223> Synthetic Oligonucleotide Probe

<400> 251  
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<210> 252  
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<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 252  
gatggctagg ttctggaggt tctg 24

<210> 253  
<211> 47  
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<220>  
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<400> 253  
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<210> 254  
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tgaacgcagg agctgtcatt gactggccca cagaggaggg caaggaagta 150  
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P1618P2C3 sequence listing.txt

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<210> 255  
 <211> 452  
 <212> PRT  
 <213> Homo Sapien



P1618P2C3 sequence listing.txt

<400> 255

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Trp Pro Thr Glu Glu Gly Lys Glu Val Trp Asp Tyr Val Thr Val
      35      40      45
Arg Lys Asp Ala Tyr Met Phe Trp Trp Leu Tyr Tyr Ala Thr Asn
      50      55      60
Ser Cys Lys Asn Phe Ser Glu Leu Pro Leu Val Met Trp Leu Gln
      65      70      75
Gly Gly Pro Gly Gly Ser Ser Thr Gly Phe Gly Asn Phe Glu Glu
      80      85      90
Ile Gly Pro Leu Asp Ser Asp Leu Lys Pro Arg Lys Thr Thr Trp
      95     100     105
Leu Gln Ala Ala Ser Leu Leu Phe Val Asp Asn Pro Val Gly Thr
     110     115     120
Gly Phe Ser Tyr Val Asn Gly Ser Gly Ala Tyr Ala Lys Asp Leu
     125     130     135
Ala Met Val Ala Ser Asp Met Met Val Leu Leu Lys Thr Phe Phe
     140     145     150
Ser Cys His Lys Glu Phe Gln Thr Val Pro Phe Tyr Ile Phe Ser
     155     160     165
Glu Ser Tyr Gly Gly Lys Met Ala Ala Gly Ile Gly Leu Glu Leu
     170     175     180
Tyr Lys Ala Ile Gln Arg Gly Thr Ile Lys Cys Asn Phe Ala Gly
     185     190     195
Val Ala Leu Gly Asp Ser Trp Ile Ser Pro Val Asp Ser Val Leu
     200     205     210
Ser Trp Gly Pro Tyr Leu Tyr Ser Met Ser Leu Leu Glu Asp Lys
     215     220     225
Gly Leu Ala Glu Val Ser Lys Val Ala Glu Gln Val Leu Asn Ala
     230     235     240
Val Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu Leu Trp Gly Lys
     245     250     255
Ala Glu Met Ile Ile Glu Gln Asn Thr Asp Gly Val Asn Phe Tyr
     260     265     270
Asn Ile Leu Thr Lys Ser Thr Pro Thr Ser Thr Met Glu Ser Ser
     275     280     285
Leu Glu Phe Thr Gln Ser His Leu Val Cys Leu Cys Gln Arg His
     290     295     300
Val Arg His Leu Gln Arg Asp Ala Leu Ser Gln Leu Met Asn Gly
     305     310     315

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P1618P2C3 sequence listing.txt

Pro	Ile	Arg	Lys	Lys	Leu	Lys	Ile	Ile	Pro	Glu	Asp	Gln	Ser	Trp
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Gly	Gly	Gln	Ala	Thr	Asn	Val	Phe	Val	Asn	Met	Glu	Glu	Asp	Phe
				335					340					345
Met	Lys	Pro	Val	Ile	Ser	Ile	Val	Asp	Glu	Leu	Leu	Glu	Ala	Gly
				350					355					360
Ile	Asn	Val	Thr	Val	Tyr	Asn	Gly	Gln	Leu	Asp	Leu	Ile	Val	Asp
				365					370					375
Thr	Met	Gly	Gln	Glu	Ala	Trp	Val	Arg	Lys	Leu	Lys	Trp	Pro	Glu
				380					385					390
Leu	Pro	Lys	Phe	Ser	Gln	Leu	Lys	Trp	Lys	Ala	Leu	Tyr	Ser	Asp
				395					400					405
Pro	Lys	Ser	Leu	Glu	Thr	Ser	Ala	Phe	Val	Lys	Ser	Tyr	Lys	Asn
				410					415					420
Leu	Ala	Phe	Tyr	Trp	Ile	Leu	Lys	Ala	Gly	His	Met	Val	Pro	Ser
				425					430					435
Asp	Gln	Gly	Asp	Met	Ala	Leu	Lys	Met	Met	Arg	Leu	Val	Thr	Gln
				440					445					450

Gln Glu

<210> 256  
 <211> 1100  
 <212> DNA  
 <213> Homo Sapien

<400> 256  
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 ccacatttga gtttgagaac cggacagact gctgggtgac tggctggggg 550  
 tacatcaaag aggatgaggc actgccatct cccacaccc tccaggaagt 600  
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P1618P2C3 sequence listing.txt

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 gctgtgggtcg gccaatcgg cccggtgtct acaccaatat cagccaccac 850  
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 cccctcctgg ccactactct ttttccctct tctctgggct ctcccactcc 950  
 tggggccggt ctgagcctac ctgagcccat gcagcctggg gccactgcca 1000  
 agtcaggccc tggttctctt ctgtcttgtt tggttaataaa cacattccag 1050  
 ttgatgcctt gcagggcatt cttcaaaaaa aaaaaaaaaa aaaaaaaaaa 1100

<210> 257

<211> 314

<212> PRT

<213> Homo Sapien

<400> 257

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				20					25					30
Gly	Pro	Cys	Gly	Arg	Arg	Val	Ile	Thr	Ser	Arg	Ile	Val	Gly	Gly
				35					40					45
Glu	Asp	Ala	Glu	Leu	Gly	Arg	Trp	Pro	Trp	Gln	Gly	Ser	Leu	Arg
				50					55					60
Leu	Trp	Asp	Ser	His	Val	Cys	Gly	Val	Ser	Leu	Leu	Ser	His	Arg
				65					70					75
Trp	Ala	Leu	Thr	Ala	Ala	His	Cys	Phe	Glu	Thr	Tyr	Ser	Asp	Leu
				80					85					90
Ser	Asp	Pro	Ser	Gly	Trp	Met	Val	Gln	Phe	Gly	Gln	Leu	Thr	Ser
				95					100					105
Met	Pro	Ser	Phe	Trp	Ser	Leu	Gln	Ala	Tyr	Tyr	Thr	Arg	Tyr	Phe
				110					115					120
Val	Ser	Asn	Ile	Tyr	Leu	Ser	Pro	Arg	Tyr	Leu	Gly	Asn	Ser	Pro
				125					130					135
Tyr	Asp	Ile	Ala	Leu	Val	Lys	Leu	Ser	Ala	Pro	Val	Thr	Tyr	Thr
				140					145					150
Lys	His	Ile	Gln	Pro	Ile	Cys	Leu	Gln	Ala	Ser	Thr	Phe	Glu	Phe
				155					160					165
Glu	Asn	Arg	Thr	Asp	Cys	Trp	Val	Thr	Gly	Trp	Gly	Tyr	Ile	Lys
				170					175					180
Glu	Asp	Glu	Ala	Leu	Pro	Ser	Pro	His	Thr	Leu	Gln	Glu	Val	Gln
				185					190					195

P1618P2C3 sequence listing.txt

Val	Ala	Ile	Ile	Asn	Asn	Ser	Met	Cys	Asn	His	Leu	Phe	Leu	Lys
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Tyr	Ser	Phe	Arg	Lys	Asp	Ile	Phe	Gly	Asp	Met	Val	Cys	Ala	Gly
				215					220					225
Asn	Ala	Gln	Gly	Gly	Lys	Asp	Ala	Cys	Phe	Gly	Asp	Ser	Gly	Gly
				230					235					240
Pro	Leu	Ala	Cys	Asn	Lys	Asn	Gly	Leu	Trp	Tyr	Gln	Ile	Gly	Val
				245					250					255
Val	Ser	Trp	Gly	Val	Gly	Cys	Gly	Arg	Pro	Asn	Arg	Pro	Gly	Val
				260					265					270
Tyr	Thr	Asn	Ile	Ser	His	His	Phe	Glu	Trp	Ile	Gln	Lys	Leu	Met
				275					280					285
Ala	Gln	Ser	Gly	Met	Ser	Gln	Pro	Asp	Pro	Ser	Trp	Pro	Leu	Leu
				290					295					300
Phe	Phe	Pro	Leu	Leu	Trp	Ala	Leu	Pro	Leu	Leu	Gly	Pro	Val	
				305					310					

<210> 258  
 <211> 2427  
 <212> DNA  
 <213> Homo Sapien

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 cggagccccga ccagcggagg acgctgcccc caggctgggt gtccctgggc 150  
 cgtgcgagacc ctgaggaaga gctgagtctc acctttgccc tgagacagca 200  
 gaatgtggaa agactctcgg agctggtgca ggctgtgtcg gatccagct 250  
 ctctcaata cggaataac ctgaccctag agaatgtggc tgatctggtg 300  
 aggccatccc cactgaccct ccacacggtg caaaaatggc tcttggcagc 350  
 cggagccag aagtgccatt ctgtgatcac acaggacttt ctgacttgct 400  
 ggctgagcat ccgacaagca gagctgctgc tccctggggc tgagtttcat 450  
 cactatgtgg gaggacctac ggaaacccat gttgtaaggt cccacatcc 500  
 ctaccagctt ccacaggcct tggcccccca tgtggacttt gtggggggac 550  
 tgcaccgttt tcccccaaca tcatccctga ggcaacgtcc tgagccgcag 600  
 gtgacagggg ctgtaggcct gcatctgggg gtaacccct ctgtgatccg 650  
 taagcgatac aacttgacct cacaagacgt gggctctggc accagcaata 700  
 acagccaagc ctgtgcccag ttcctggagc agtatttcca tgactcagac 750  
 ctggctcagt tcatgcgcct cttcgggtggc aactttgcac atcaggcatc 800  
 agtagcccg gtggttgagc aacagggccg gggccggggc gggattgagg 850

P1618P2C3 sequence listing.txt

ccagtctaga tgtgcagtac ctgatgagtg ctggtgccaa catctccacc 900  
 tgggtctaca gtagccctgg ccggcatgag ggacaggagc ccttcctgca 950  
 gtggctcatg ctgctcagta atgagtcagc cctgccacat gtgcatactg 1000  
 tgagctatgg agatgatgag gactccctca gcagcgccta catccagcgg 1050  
 gtcaacactg agctcatgaa ggctgccgct cggggctctca ccctgctctt 1100  
 cgcctcaggt gacagtgggg ccgggtgttg gtctgtctctt ggaagacacc 1150  
 agttccgccc taccttccct gcctccagcc cctatgtcac cacagtggga 1200  
 ggcacatcct tccaggaacc tttctcatc acaaatgaaa ttgttgacta 1250  
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 aggaagctgt aacgaagttc ctgagctcta gccccacct gccaccatcc 1350  
 agttacttca atgccagtgg ccgtgcctac ccagatgtgg ctgcactttc 1400  
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 aacctgaaa tgctgtgagc ttgacttgac tcccaacct accatgctcc 1900  
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 tgtagatttt tgctcttctc agtttactca ttgtcccctg gaacaaatca 2350  
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P1618P2C3 sequence listing.txt  
aatgattgat acctcaaatg taaaaaa 2427

<210> 259  
<211> 556  
<212> PRT  
<213> Homo Sapien

<400> 259  
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20 25 30  
Leu Pro Pro Gly Trp Val Ser Leu Gly Arg Ala Asp Pro Glu Glu  
35 40 45  
Glu Leu Ser Leu Thr Phe Ala Leu Arg Gln Gln Asn Val Glu Arg  
50 55 60  
Leu Ser Glu Leu Val Gln Ala Val Ser Asp Pro Ser Ser Pro Gln  
65 70 75  
Tyr Gly Lys Tyr Leu Thr Leu Glu Asn Val Ala Asp Leu Val Arg  
80 85 90  
Pro Ser Pro Leu Thr Leu His Thr Val Gln Lys Trp Leu Leu Ala  
95 100 105  
Ala Gly Ala Gln Lys Cys His Ser Val Ile Thr Gln Asp Phe Leu  
110 115 120  
Thr Cys Trp Leu Ser Ile Arg Gln Ala Glu Leu Leu Leu Pro Gly  
125 130 135  
Ala Glu Phe His His Tyr Val Gly Gly Pro Thr Glu Thr His Val  
140 145 150  
Val Arg Ser Pro His Pro Tyr Gln Leu Pro Gln Ala Leu Ala Pro  
155 160 165  
His Val Asp Phe Val Gly Gly Leu His Arg Phe Pro Pro Thr Ser  
170 175 180  
Ser Leu Arg Gln Arg Pro Glu Pro Gln Val Thr Gly Thr Val Gly  
185 190 195  
Leu His Leu Gly Val Thr Pro Ser Val Ile Arg Lys Arg Tyr Asn  
200 205 210  
Leu Thr Ser Gln Asp Val Gly Ser Gly Thr Ser Asn Asn Ser Gln  
215 220 225  
Ala Cys Ala Gln Phe Leu Glu Gln Tyr Phe His Asp Ser Asp Leu  
230 235 240  
Ala Gln Phe Met Arg Leu Phe Gly Gly Asn Phe Ala His Gln Ala  
245 250 255  
Ser Val Ala Arg Val Val Gly Gln Gln Gly Arg Gly Arg Ala Gly  
260 265 270  
Ile Glu Ala Ser Leu Asp Val Gln Tyr Leu Met Ser Ala Gly Ala

P1618P2C3 sequence listing.txt

275		280		285
Asn Ile Ser Thr	Trp Val Tyr Ser Ser	Pro Gly Arg His Glu	Gly	
290		295	300	
Gln Glu Pro Phe	Leu Gln Trp Leu Met	Leu Leu Ser Asn Glu	Ser	
305		310	315	
Ala Leu Pro His	Val His Thr Val Ser	Tyr Gly Asp Asp Glu	Asp	
320		325	330	
Ser Leu Ser Ser	Ala Tyr Ile Gln Arg	Val Asn Thr Glu Leu	Met	
335		340	345	
Lys Ala Ala Ala	Arg Gly Leu Thr Leu	Leu Phe Ala Ser Gly	Asp	
350		355	360	
Ser Gly Ala Gly	Cys Trp Ser Val Ser	Gly Arg His Gln Phe	Arg	
365		370	375	
Pro Thr Phe Pro	Ala Ser Ser Pro Tyr	Val Thr Thr Val Gly	Gly	
380		385	390	
Thr Ser Phe Gln	Glu Pro Phe Leu Ile	Thr Asn Glu Ile Val	Asp	
395		400	405	
Tyr Ile Ser Gly	Gly Gly Phe Ser Asn	Val Phe Pro Arg Pro	Ser	
410		415	420	
Tyr Gln Glu Glu	Ala Val Thr Lys Phe	Leu Ser Ser Ser Pro	His	
425		430	435	
Leu Pro Pro Ser	Ser Tyr Phe Asn Ala	Ser Gly Arg Ala Tyr	Pro	
440		445	450	
Asp Val Ala Ala	Leu Ser Asp Gly Tyr	Trp Val Val Ser Asn	Arg	
455		460	465	
Val Pro Ile Pro	Trp Val Ser Gly Thr	Ser Ala Ser Thr Pro	Val	
470		475	480	
Phe Gly Gly Ile	Leu Ser Leu Ile Asn	Glu His Arg Ile Leu	Ser	
485		490	495	
Gly Arg Pro Pro	Leu Gly Phe Leu Asn	Pro Arg Leu Tyr Gln	Gln	
500		505	510	
His Gly Ala Gly	Leu Phe Asp Val Thr	Arg Gly Cys His Glu	Ser	
515		520	525	
Cys Leu Asp Glu	Glu Val Glu Gly Gln	Gly Phe Cys Ser Gly	Pro	
530		535	540	
Gly Trp Asp Pro	Val Thr Gly Trp Gly	Thr Pro Thr Ser Gln	Leu	
545		550	555	

Cys

<210> 260  
 <211> 1638  
 <212> DNA  
 <213> Homo Sapien

P1618P2C3 sequence listing.txt

<400> 260

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attccagggc tcctcttcct tctcttcttt ctgctctgtg ctgttgggca 150
agtgagccct tacagtgcc cctggaaacc cacttggcct gcataccgcc 200
tccctgtcgt cttgccccag tctaccctca atttagccaa gccagacttt 250
ggagccgaag ccaaattaga agtatcttct tcatgtggac ccagtggtca 300
taagggaact ccactgcca cttacgaaga ggccaagcaa tatctgtctt 350
atgaaacgct ctatgccaat ggagccgca cagagacgca ggtgggcatc 400
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ttcaggaaag tctcgaagga agcggcagat ttatggctat gacagcaggt 500
tcagcatttt tgggaaggac ttctgtctca actacccttt ctcaacatca 550
gtgaagttaa ccacgggctg caccggcacc ctggtggcag agaagcatgt 600
cctcacagct gccactgca tacacgatgg aaaaacctat gtgaaaggaa 650
cccagaagct tcgagtgggc ttcctaaagc ccaagtttaa agatggtggt 700
cgagggggcca acgactccac ttcagccatg cccgagcaga tgaaatttca 750
gtggatccgg gtgaaacgca cccatgtgcc caagggttgg atcaagggca 800
atgccaatga catcggcatg gattatgatt atgccctcct ggaactcaa 850
aagccccaca agagaaaatt tatgaagatt ggggtgagcc ctctgtctaa 900
gcagctgcca gggggcagaa ttcacttctc tggttatgac aatgaccgac 950
caggcaattt ggtgtatcgc ttctgtgacg tcaaagacga gacctatgac 1000
ttgctctacc agcaatgcga tgcccagcca ggggccagcg ggtctgggg 1050
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gatttcaacg tggctgtcag aatcactcct ctcaaataatg cccagatttg 1200
ctattggatt aaaggaaact acctggattg tagggagggg tgacacagt 1250
ttccctcctg gcagcaatta agggctcttca tgttcttatt ttaggagagg 1300
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tgtgtgtaag gtgtcttata atcttttacc tatttcttac aattgcaaga 1400
tgactggctt tactatttga aaactggttt gtgtatcata tcatatatca 1450
tttaagcagt ttgaaggcat acttttgcac agaaataaaa aaaatactga 1500
tttggggcaa tgaggaatat ttgacaatta agttaatctt cacgtttttg 1550

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P1618P2C3 sequence listing.txt

caaactttga tttttatttc atctgaactt gtttcaaaga tttatattaa 1600

atatttggca tacaagagat atgaaaaaaaa aaaaaaaaa 1638

<210> 261

<211> 383

<212> PRT

<213> Homo Sapien

<400> 261

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Cys Ala Val Gly Gln Val Ser Pro Tyr Ser Ala Pro Trp Lys Pro  
20 25 30

Thr Trp Pro Ala Tyr Arg Leu Pro Val Val Leu Pro Gln Ser Thr  
35 40 45

Leu Asn Leu Ala Lys Pro Asp Phe Gly Ala Glu Ala Lys Leu Glu  
50 55 60

Val Ser Ser Ser Cys Gly Pro Gln Cys His Lys Gly Thr Pro Leu  
65 70 75

Pro Thr Tyr Glu Glu Ala Lys Gln Tyr Leu Ser Tyr Glu Thr Leu  
80 85 90

Tyr Ala Asn Gly Ser Arg Thr Glu Thr Gln Val Gly Ile Tyr Ile  
95 100 105

Leu Ser Ser Ser Gly Asp Gly Ala Gln His Arg Asp Ser Gly Ser  
110 115 120

Ser Gly Lys Ser Arg Arg Lys Arg Gln Ile Tyr Gly Tyr Asp Ser  
125 130 135

Arg Phe Ser Ile Phe Gly Lys Asp Phe Leu Leu Asn Tyr Pro Phe  
140 145 150

Ser Thr Ser Val Lys Leu Ser Thr Gly Cys Thr Gly Thr Leu Val  
155 160 165

Ala Glu Lys His Val Leu Thr Ala Ala His Cys Ile His Asp Gly  
170 175 180

Lys Thr Tyr Val Lys Gly Thr Gln Lys Leu Arg Val Gly Phe Leu  
185 190 195

Lys Pro Lys Phe Lys Asp Gly Gly Arg Gly Ala Asn Asp Ser Thr  
200 205 210

Ser Ala Met Pro Glu Gln Met Lys Phe Gln Trp Ile Arg Val Lys  
215 220 225

Arg Thr His Val Pro Lys Gly Trp Ile Lys Gly Asn Ala Asn Asp  
230 235 240

Ile Gly Met Asp Tyr Asp Tyr Ala Leu Leu Glu Leu Lys Lys Pro  
245 250 255

His Lys Arg Lys Phe Met Lys Ile Gly Val Ser Pro Pro Ala Lys

P1618P2C3 sequence listing.txt

260		265	270
Gln Leu Pro Gly	Gly Arg Ile His Phe	Ser Gly Tyr Asp Asn	Asp
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Arg Pro Gly Asn	Leu Val Tyr Arg Phe	Cys Asp Val Lys Asp	Glu
	290	295	300
Thr Tyr Asp Leu	Leu Tyr Gln Gln Cys	Asp Ala Gln Pro Gly	Ala
	305	310	315
Ser Gly Ser Gly	Val Tyr Val Arg Met	Trp Lys Arg Gln Gln	Gln
	320	325	330
Lys Trp Glu Arg	Lys Ile Ile Gly Ile	Phe Ser Gly His Gln	Trp
	335	340	345
Val Asp Met Asn	Gly Ser Pro Gln Asp	Phe Asn Val Ala Val	Arg
	350	355	360
Ile Thr Pro Leu	Lys Tyr Ala Gln Ile	Cys Tyr Trp Ile Lys	Gly
	365	370	375
Asn Tyr Leu Asp	Cys Arg Glu Gly		
	380		

<210> 262  
 <211> 1378  
 <212> DNA  
 <213> Homo Sapien

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 accttcacct ccctgctgct gctggcgtcg acagccatcc tcaatgcggc 150  
 caggatacct gttccccag cctgtgggaa gcccagcag ctgaaccggg 200  
 ttgtgggcgg cgaggacagc actgacagcg agtggccctg gatcgtgagc 250  
 atccagaaga atgggaccca cactgcgca gggtctctgc tcaccagccg 300  
 ctgggtgatc actgctgccc actgtttcaa ggacaacctg aacaaacct 350  
 acctgttctc tgtgctgctg ggggcctggc agctggggaa ccctggctct 400  
 cgggtcccaga aggtgggtgt tgcctgggtg gagccccacc ctgtgtattc 450  
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 ccatacagtt ctcagagcgg gtccctgcca tctgcctacc tgatgcctct 550  
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 ggacagggac ccatcactga ggacatgctg tgtgccggct acttgagggg 750  
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P1618P2C3 sequence listing.txt

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 cacatctgga tctggatctg cggcggcctc gggcggtttc ccccgccgta 1100  
 aataggctca tctacctcta cctctggggg cccggacggc tgctgcggaa 1150  
 aggaaacccc ctccccgacc cgcccagcgg cctcaggccc ccctccaagg 1200  
 catcaggccc cgcccaacgg cctcatgtcc ccgccccac gacttccggc 1250  
 cccgcccccg ggccccagcg cttttgtgta tataaatgtt aatgattttt 1300  
 ataggtattt gtaaccctgc ccacatatct tatttattcc tccaatttca 1350  
 ataaattatt tattctccaa aaaaaaaa 1378

<210> 263

<211> 317

<212> PRT

<213> Homo sapien

<400> 263

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Gly	Thr	Phe	Thr	Ser	Leu	Leu	Leu	Ala	Ser	Thr	Ala	Ile	Leu	
				20				25					30	
Asn	Ala	Ala	Arg	Ile	Pro	Val	Pro	Pro	Ala	Cys	Gly	Lys	Pro	Gln
				35					40					45
Gln	Leu	Asn	Arg	Val	Val	Gly	Gly	Glu	Asp	Ser	Thr	Asp	Ser	Glu
				50					55					60
Trp	Pro	Trp	Ile	Val	Ser	Ile	Gln	Lys	Asn	Gly	Thr	His	His	Cys
				65					70					75
Ala	Gly	Ser	Leu	Leu	Thr	Ser	Arg	Trp	Val	Ile	Thr	Ala	Ala	His
				80					85					90
Cys	Phe	Lys	Asp	Asn	Leu	Asn	Lys	Pro	Tyr	Leu	Phe	Ser	Val	Leu
				95					100					105
Leu	Gly	Ala	Trp	Gln	Leu	Gly	Asn	Pro	Gly	Ser	Arg	Ser	Gln	Lys
				110					115					120
Val	Gly	Val	Ala	Trp	Val	Glu	Pro	His	Pro	Val	Tyr	Ser	Trp	Lys
				125					130					135
Glu	Gly	Ala	Cys	Ala	Asp	Ile	Ala	Leu	Val	Arg	Leu	Glu	Arg	Ser
				140					145					150
Ile	Gln	Phe	Ser	Glu	Arg	Val	Leu	Pro	Ile	Cys	Leu	Pro	Asp	Ala
				155					160					165

P1618P2C3 sequence listing.txt

Ser	Ile	His	Leu	Pro	Pro	Asn	Thr	His	Cys	Trp	Ile	Ser	Gly	Trp	170	175	180
Gly	Ser	Ile	Gln	Asp	Gly	Val	Pro	Leu	Pro	His	Pro	Gln	Thr	Leu	185	190	195
Gln	Lys	Leu	Lys	Val	Pro	Ile	Ile	Asp	Ser	Glu	Val	Cys	Ser	His	200	205	210
Leu	Tyr	Trp	Arg	Gly	Ala	Gly	Gln	Gly	Pro	Ile	Thr	Glu	Asp	Met	215	220	225
Leu	Cys	Ala	Gly	Tyr	Leu	Glu	Gly	Glu	Arg	Asp	Ala	Cys	Leu	Gly	230	235	240
Asp	Ser	Gly	Gly	Pro	Leu	Met	Cys	Gln	Val	Asp	Gly	Ala	Trp	Leu	245	250	255
Leu	Ala	Gly	Ile	Ile	Ser	Trp	Gly	Glu	Gly	Cys	Ala	Glu	Arg	Asn	260	265	270
Arg	Pro	Gly	Val	Tyr	Ile	Ser	Leu	Ser	Ala	His	Arg	Ser	Trp	Val	275	280	285
Glu	Lys	Ile	Val	Gln	Gly	Val	Gln	Leu	Arg	Gly	Arg	Ala	Gln	Gly	290	295	300
Gly	Gly	Ala	Leu	Arg	Ala	Pro	Ser	Gln	Gly	Ser	Gly	Ala	Ala	Ala	305	310	315

Arg Ser

<210> 264

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

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<400> 264

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<211> 19

<212> DNA

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<223> Synthetic Oligonucleotide Probe

<400> 265

gcagaggtgt ctaaggttg 19

<210> 266

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

P1618P2C3 sequence listing.txt

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<210> 267  
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<212> DNA  
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<220>  
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<210> 268  
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<220>  
<223> Synthetic Oligonucleotide Probe

<400> 269  
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<210> 270  
<211> 50  
<212> DNA  
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<210> 271  
<211> 26  
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<220>  
<223> Synthetic Oligonucleotide Probe

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<210> 272  
<211> 18  
<212> DNA  
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P1618P2C3 sequence listing.txt

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<210> 273  
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<212> DNA  
<213> Artificial Sequence  
  
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<223> Synthetic Oligonucleotide Probe  
  
<400> 273  
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<210> 274  
<211> 24  
<212> DNA  
<213> Artificial Sequence  
  
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<223> Synthetic Oligonucleotide Probe  
  
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<210> 275  
<211> 45  
<212> DNA  
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<220>  
<223> Synthetic Oligonucleotide Probe  
  
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<210> 276  
<211> 21  
<212> DNA  
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<223> Synthetic Oligonucleotide Probe  
  
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<210> 277  
<211> 18  
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<400> 277  
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<210> 278

P1618P2C3 sequence listing.txt

<211> 18  
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<220>  
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<400> 278  
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<210> 279  
<211> 24  
<212> DNA  
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<220>  
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<400> 279  
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<210> 280  
<211> 45  
<212> DNA  
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<220>  
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<400> 280  
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<210> 281  
<211> 34  
<212> DNA  
<213> Artificial Sequence

<220>  
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<400> 281  
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<210> 282  
<211> 61  
<212> DNA  
<213> Artificial Sequence

<220>  
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<400> 282  
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tgccaggtgg a 61

<210> 283  
<211> 119  
<212> DNA  
<213> Artificial Sequence

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P1618P2C3 sequence listing.txt

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 atgctgtgtg ccggctact 119

<210> 284  
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 <213> Homo Sapien

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 agatgaggag aaacgtttga tggtaggagc gcacaacctc taccgggccc 150  
 aggtatcccc gacggcctca gacatgctgc acatgagatg ggacgaggag 200  
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 caaggagcgc gggcgccgcg gcgagaatct gttcgccatc acagacgagg 300  
 gcatggacgt gccgctggcc atggaggagt ggcaccacga gcgtgagcac 350  
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 aatgggtact ctttcttccc tagcaacggg gattccggct ttcttggtaa 750  
 cagaggtctc aggtctcctg gcaaccaagg ctctgcctgc tgtggaaacc 800  
 caggcccca cttccttagc aacgaaagac ccgccctcca tggcaacaga 850  
 ggctccacct tgcgtaacaa ctgagggtccc ttccattttg gcagctcaca 900  
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 gttcctatcc caaaatcagc agacaaagt acagacaaaa caaaagtgcc 1000  
 ctctaggagc ccagagaact ctctggaccc caagatgtcc ctgacagggg 1050  
 caagggaact cctaccccat gcccaaggag aggtgaggc tgaggctgag 1100  
 ttgcctcctt ccagtgaggt cttggcctca gtttttccag cccaggacaa 1150  
 gccagggtgag ctgcaggcca cactggacca cacggggcac acctcctcca 1200  
 agtccctgcc caatttcccc aatacctctg ccaccgctaa tgccacgggt 1250



P1618P2C3 sequence listing.txt

gggcgtgccc tggctctgca gtcgtccttg ccagggtgcag agggccctga 1300  
 caagcctagc gttgtgtcag ggctgaactc gggccctggt catgtgtggg 1350  
 gccctctcct gggactactg ctctgcctc ctctggtggt ggctggaatc 1400  
 ttctgaatgg gataccactc aaagggtgaa gaggtcagct gtcctcctgt 1450  
 catcttcccc accctgtccc cagcccctaa acaagatact tcttggttaa 1500  
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 atcctggagg cacaaggcct ggctggctgc gagctcagga ggccgcctga 1600  
 ggactgcaca ccggggccac acctctcctg cccctccctc ctgagtcctg 1650  
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<210> 285

<211> 463

<212> PRT

<213> Homo Sapien

<400> 285

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Leu	Leu	Leu	Val	Ala	Thr	Thr	Gly	Pro	Val	Gly	Ala	Leu	Thr	Asp
			20						25				30	
Glu	Glu	Lys	Arg	Leu	Met	Val	Glu	Leu	His	Asn	Leu	Tyr	Arg	Ala
			35						40				45	
Gln	Val	Ser	Pro	Thr	Ala	Ser	Asp	Met	Leu	His	Met	Arg	Trp	Asp
			50						55				60	
Glu	Glu	Leu	Ala	Ala	Phe	Ala	Lys	Ala	Tyr	Ala	Arg	Gln	Cys	Val
			65						70				75	
Trp	Gly	His	Asn	Lys	Glu	Arg	Gly	Arg	Arg	Gly	Glu	Asn	Leu	Phe
			80						85				90	
Ala	Ile	Thr	Asp	Glu	Gly	Met	Asp	Val	Pro	Leu	Ala	Met	Glu	Glu
			95						100				105	
Trp	His	His	Glu	Arg	Glu	His	Tyr	Asn	Leu	Ser	Ala	Ala	Thr	Cys
			110						115				120	
Ser	Pro	Gly	Gln	Met	Cys	Gly	His	Tyr	Thr	Gln	Val	Val	Trp	Ala
			125						130				135	
Lys	Thr	Glu	Arg	Ile	Gly	Cys	Gly	Ser	His	Phe	Cys	Glu	Lys	Leu
			140						145				150	

P1618P2C3 sequence listing.txt

Gln Gly Val Glu	Glu Thr Asn Ile Glu	Leu Leu Val Cys Asn Tyr
155		160 165
Glu Pro Pro Gly	Asn Val Lys Gly Lys	Arg Pro Tyr Gln Glu Gly
170		175 180
Thr Pro Cys Ser	Gln Cys Pro Ser Gly	Tyr His Cys Lys Asn Ser
185		190 195
Leu Cys Glu Pro	Ile Gly Ser Pro Glu	Asp Ala Gln Asp Leu Pro
200		205 210
Tyr Leu Val Thr	Glu Ala Pro Ser Phe	Arg Ala Thr Glu Ala Ser
215		220 225
Asp Ser Arg Lys	Met Gly Thr Pro Ser	Ser Leu Ala Thr Gly Ile
230		235 240
Pro Ala Phe Leu	Val Thr Glu Val Ser	Gly Ser Leu Ala Thr Lys
245		250 255
Ala Leu Pro Ala	Val Glu Thr Gln Ala	Pro Thr Ser Leu Ala Thr
260		265 270
Lys Asp Pro Pro	Ser Met Ala Thr Glu	Ala Pro Pro Cys Val Thr
275		280 285
Thr Glu Val Pro	Ser Ile Leu Ala Ala	His Ser Leu Pro Ser Leu
290		295 300
Asp Glu Glu Pro	Val Thr Phe Pro Lys	Ser Thr His Val Pro Ile
305		310 315
Pro Lys Ser Ala	Asp Lys Val Thr Asp	Lys Thr Lys Val Pro Ser
320		325 330
Arg Ser Pro Glu	Asn Ser Leu Asp Pro	Lys Met Ser Leu Thr Gly
335		340 345
Ala Arg Glu Leu	Leu Pro His Ala Gln	Glu Glu Ala Glu Ala Glu
350		355 360
Ala Glu Leu Pro	Pro Ser Ser Glu Val	Leu Ala Ser Val Phe Pro
365		370 375
Ala Gln Asp Lys	Pro Gly Glu Leu Gln	Ala Thr Leu Asp His Thr
380		385 390
Gly His Thr Ser	Ser Lys Ser Leu Pro	Asn Phe Pro Asn Thr Ser
395		400 405
Ala Thr Ala Asn	Ala Thr Gly Gly Arg	Ala Leu Ala Leu Gln Ser
410		415 420
Ser Leu Pro Gly	Ala Glu Gly Pro Asp	Lys Pro Ser Val Val Ser
425		430 435
Gly Leu Asn Ser	Gly Pro Gly His Val	Trp Gly Pro Leu Leu Gly
440		445 450
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455		460

P1618P2C3 sequence listing.txt

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<210> 286
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 286
tcctgcagtt tcctgatgc 19

<210> 287
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 287
ctcatattgc acaccagtaa ttcg 24

<210> 288
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 288
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<210> 289
<211> 3662
<212> DNA
<213> Homo Sapien

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caaggcaagt tccatgagcc accttcaaag ccttcgagaa gtgaaactga 200
acaacaatga attggagacc attccaaatc tgggaccagt ctcggaat 250
attacacttc tctccttggc tggaaacagg attgttgaaa tactccctga 300
acatctgaaa gagtttcagt cccttgaaac tttggacctt agcagcaaca 350
atatttcaga gctccaaact gcatttcag ccctacagct caaatatctg 400
tatctcaaca gcaaccgagt cacatcaatg gaacctgggt attttgacaa 450
tttggccaac aactccttg tgtaaagct gaacaggaac cgaatctcag 500
ctatcccacc caagatgttt aaactgcccc aactgcaaca tctcgaattg 550
aaccgaaaca agattaataaa tgtagatgga ctgacattcc aaggccttgg 600

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P1618P2C3 sequence listing.txt

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atggagcttt ttgggggctg agcaacatgg aaattttgca gctggaccat 700  
aacaacctaa cagagattac caaaggctgg ctttacggct tgctgatgct 750  
gcaggaactt catctcagcc aaaatgccat caacaggatc agccctgatg 800  
cctgggagtt ctgccagaag ctcagtgagc tggacctaac tttcaatcac 850  
ttatcaaggt tagatgattc aagcttcctt ggcctaagct tactaaatac 900  
actgcacatt gggacaaca gagtcagcta cattgctgat tgtgccttcc 950  
gggggctttc cagtttaaaag actttggatc tgaagaacaa tgaaatttcc 1000  
tggactattg aagacatgaa tgggtgcttc tctgggcttg acaaactgag 1050  
gcgactgata ctccaaggaa atcggatccg ttctattact aaaaaagcct 1100  
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gcatttaaata acatcaagcc ttttgtgcga ttgccagcta aaatggctcc 1250  
cacagtgggt ggcggaaaaac aactttcaga gctttgtaaa tgccagttgt 1300  
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gtatacagct gcacagctca gaacagtgc ggaagtattt cagcaaatgc 1950  
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gaactgtaac caaggagaa acagccgtcc tacagtgcac tgctggagga 2050  
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aaccgagagg cacttttttg cagcaggcaa tcagcttctg attattgtgg 2150  
actcagatgt cagtgatgct gggaaataca catgtgagat gtctaacc 2200

P1618P2C3 sequence listing.txt

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<210> 290  
 <211> 1059

P1618P2C3 sequence listing.txt

<212> PRT

<213> Homo Sapien

<400> 290

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Ile	Ser	Arg	Pro	Asp	Leu	Ser	His	Asn	Arg	Leu	Ser	Phe	Ile	Lys
				20					25					30
Ala	Ser	Ser	Met	Ser	His	Leu	Gln	Ser	Leu	Arg	Glu	Val	Lys	Leu
				35					40					45
Asn	Asn	Asn	Glu	Leu	Glu	Thr	Ile	Pro	Asn	Leu	Gly	Pro	Val	Ser
				50					55					60
Ala	Asn	Ile	Thr	Leu	Leu	Ser	Leu	Ala	Gly	Asn	Arg	Ile	Val	Glu
				65					70					75
Ile	Leu	Pro	Glu	His	Leu	Lys	Glu	Phe	Gln	Ser	Leu	Glu	Thr	Leu
				80					85					90
Asp	Leu	Ser	Ser	Asn	Asn	Ile	Ser	Glu	Leu	Gln	Thr	Ala	Phe	Pro
				95					100					105
Ala	Leu	Gln	Leu	Lys	Tyr	Leu	Tyr	Leu	Asn	Ser	Asn	Arg	Val	Thr
				110					115					120
Ser	Met	Glu	Pro	Gly	Tyr	Phe	Asp	Asn	Leu	Ala	Asn	Thr	Leu	Leu
				125					130					135
Val	Leu	Lys	Leu	Asn	Arg	Asn	Arg	Ile	Ser	Ala	Ile	Pro	Pro	Lys
				140					145					150
Met	Phe	Lys	Leu	Pro	Gln	Leu	Gln	His	Leu	Glu	Leu	Asn	Arg	Asn
				155					160					165
Lys	Ile	Lys	Asn	Val	Asp	Gly	Leu	Thr	Phe	Gln	Gly	Leu	Gly	Ala
				170					175					180
Leu	Lys	Ser	Leu	Lys	Met	Gln	Arg	Asn	Gly	Val	Thr	Lys	Leu	Met
				185					190					195
Asp	Gly	Ala	Phe	Trp	Gly	Leu	Ser	Asn	Met	Glu	Ile	Leu	Gln	Leu
				200					205					210
Asp	His	Asn	Asn	Leu	Thr	Glu	Ile	Thr	Lys	Gly	Trp	Leu	Tyr	Gly
				215					220					225
Leu	Leu	Met	Leu	Gln	Glu	Leu	His	Leu	Ser	Gln	Asn	Ala	Ile	Asn
				230					235					240
Arg	Ile	Ser	Pro	Asp	Ala	Trp	Glu	Phe	Cys	Gln	Lys	Leu	Ser	Glu
				245					250					255
Leu	Asp	Leu	Thr	Phe	Asn	His	Leu	Ser	Arg	Leu	Asp	Asp	Ser	Ser
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Phe	Leu	Gly	Leu	Ser	Leu	Leu	Asn	Thr	Leu	His	Ile	Gly	Asn	Asn
				275					280					285
Arg	Val	Ser	Tyr	Ile	Ala	Asp	Cys	Ala	Phe	Arg	Gly	Leu	Ser	Ser
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P1618P2C3 sequence listing.txt

Leu	Lys	Thr	Leu	Asp	Leu	Lys	Asn	Asn	Glu	Ile	Ser	Trp	Thr	Ile	305	310	315
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Leu	Ile	Leu	Gln	Gly	Asn	Arg	Ile	Arg	Ser	Ile	Thr	Lys	Lys	Ala	335	340	345
Phe	Thr	Gly	Leu	Asp	Ala	Leu	Glu	His	Leu	Asp	Leu	Ser	Asp	Asn	350	355	360
Ala	Ile	Met	Ser	Leu	Gln	Gly	Asn	Ala	Phe	Ser	Gln	Met	Lys	Lys	365	370	375
Leu	Gln	Gln	Leu	His	Leu	Asn	Thr	Ser	Ser	Leu	Leu	Cys	Asp	Cys	380	385	390
Gln	Leu	Lys	Trp	Leu	Pro	Gln	Trp	Val	Ala	Glu	Asn	Asn	Phe	Gln	395	400	405
Ser	Phe	Val	Asn	Ala	Ser	Cys	Ala	His	Pro	Gln	Leu	Leu	Lys	Gly	410	415	420
Arg	Ser	Ile	Phe	Ala	Val	Ser	Pro	Asp	Gly	Phe	Val	Cys	Asp	Asp	425	430	435
Phe	Pro	Lys	Pro	Gln	Ile	Thr	Val	Gln	Pro	Glu	Thr	Gln	Ser	Ala	440	445	450
Ile	Lys	Gly	Ser	Asn	Leu	Ser	Phe	Ile	Cys	Ser	Ala	Ala	Ser	Ser	455	460	465
Ser	Asp	Ser	Pro	Met	Thr	Phe	Ala	Trp	Lys	Lys	Asp	Asn	Glu	Leu	470	475	480
Leu	His	Asp	Ala	Glu	Met	Glu	Asn	Tyr	Ala	His	Leu	Arg	Ala	Gln	485	490	495
Gly	Gly	Glu	Val	Met	Glu	Tyr	Thr	Thr	Ile	Leu	Arg	Leu	Arg	Glu	500	505	510
Val	Glu	Phe	Ala	Ser	Glu	Gly	Lys	Tyr	Gln	Cys	Val	Ile	Ser	Asn	515	520	525
His	Phe	Gly	Ser	Ser	Tyr	Ser	Val	Lys	Ala	Lys	Leu	Thr	Val	Asn	530	535	540
Met	Leu	Pro	Ser	Phe	Thr	Lys	Thr	Pro	Met	Asp	Leu	Thr	Ile	Arg	545	550	555
Ala	Gly	Ala	Met	Ala	Arg	Leu	Glu	Cys	Ala	Ala	Val	Gly	His	Pro	560	565	570
Ala	Pro	Gln	Ile	Ala	Trp	Gln	Lys	Asp	Gly	Gly	Thr	Asp	Phe	Pro	575	580	585
Ala	Ala	Arg	Glu	Arg	Arg	Met	His	Val	Met	Pro	Glu	Asp	Asp	Val	590	595	600
Phe	Phe	Ile	Val	Asp	Val	Lys	Ile	Glu	Asp	Ile	Gly	Val	Tyr	Ser	605	610	615

P1618P2C3 sequence listing.txt

Cys Thr Ala Gln	Asn Ser Ala Gly Ser	Ile Ser Ala Asn Ala	Thr
	620	625	630
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Arg Thr Val Thr	Lys Gly Glu Thr Ala	Val Leu Gln Cys Ile	Ala
	650	655	660
Gly Gly Ser Pro	Pro Pro Lys Leu Asn	Trp Thr Lys Asp Asp	Ser
	665	670	675
Pro Leu Val Val	Thr Glu Arg His Phe	Phe Ala Ala Gly Asn	Gln
	680	685	690
Leu Leu Ile Ile	Val Asp Ser Asp Val	Ser Asp Ala Gly Lys	Tyr
	695	700	705
Thr Cys Glu Met	Ser Asn Thr Leu Gly	Thr Glu Arg Gly Asn	Val
	710	715	720
Arg Leu Ser Val	Ile Pro Thr Pro Thr	Cys Asp Ser Pro Gln	Met
	725	730	735
Thr Ala Pro Ser	Leu Asp Asp Asp Gly	Trp Ala Thr Val Gly	Val
	740	745	750
Val Ile Ile Ala	Val Val Cys Cys Val	Val Gly Thr Ser Leu	Val
	755	760	765
Trp Val Val Ile	Ile Tyr His Thr Arg	Arg Arg Asn Glu Asp	Cys
	770	775	780
Ser Ile Thr Asn	Thr Asp Glu Thr Asn	Leu Pro Ala Asp Ile	Pro
	785	790	795
Ser Tyr Leu Ser	Ser Gln Gly Thr Leu	Ala Asp Arg Gln Asp	Gly
	800	805	810
Tyr Val Ser Ser	Glu Ser Gly Ser His	His Gln Phe Val Thr	Ser
	815	820	825
Ser Gly Ala Gly	Phe Phe Leu Pro Gln	His Asp Ser Ser Gly	Thr
	830	835	840
Cys His Ile Asp	Asn Ser Ser Glu Ala	Asp Val Glu Ala Ala	Thr
	845	850	855
Asp Leu Phe Leu	Cys Pro Phe Leu Gly	Ser Thr Gly Pro Met	Tyr
	860	865	870
Leu Lys Gly Asn	Val Tyr Gly Ser Asp	Pro Phe Glu Thr Tyr	His
	875	880	885
Thr Gly Cys Ser	Pro Asp Pro Arg Thr	Val Leu Met Asp His	Tyr
	890	895	900
Glu Pro Ser Tyr	Ile Lys Lys Lys Glu	Cys Tyr Pro Cys Ser	His
	905	910	915
Pro Ser Glu Glu	Ser Cys Glu Arg Ser	Phe Ser Asn Ile Ser	Trp
	920	925	930



P1618P2C3 sequence listing.txt

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 Glu Gly Pro Gly Met Lys Asn Leu Cys Leu Asn Lys Ser Ser Leu  
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 Asp Phe Ser Ala Asn Pro Glu Pro Ala Ser Val Ala Ser Ser Asn  
 965 970 975  
 Ser Phe Met Gly Thr Phe Gly Lys Ala Leu Arg Arg Pro His Leu  
 980 985 990  
 Asp Ala Tyr Ser Ser Phe Gly Gln Pro Ser Asp Cys Gln Pro Arg  
 995 1000 1005  
 Ala Phe Tyr Leu Lys Ala His Ser Ser Pro Asp Leu Asp Ser Gly  
 1010 1015 1020  
 Ser Glu Glu Asp Gly Lys Glu Arg Thr Asp Phe Gln Glu Glu Asn  
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 His Ile Cys Thr Phe Lys Gln Thr Leu Glu Asn Tyr Arg Thr Pro  
 1040 1045 1050  
 Asn Phe Gln Ser Tyr Asp Leu Asp Thr  
 1055

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 <212> DNA  
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 tggaaccgaa cgcaatggat aaactgattg tgcaagagag aaggaagaac 150  
 gaagcttttt cttgtgagcc ctggatctta acacaaatgt gtatatgtgc 200  
 acacagggag cattcaagaa tgaaataaac cagagttaga cccgcggggg 250  
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 ccaccccaa aaaaaaggat gattggaaat gaagaaccga ggattcaca 350  
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 tttgtgccta tgttgactaa aattgacgga taattgcagt tggatttttc 650  
 ttcacaaacc tccttttttt taaattttta ttccttttgg tatcaagatc 700  
 atgcgttttc tcttgttctt aaccacctgg atttccatct ggatgttgct 750

P1618P2C3 sequence listing.txt

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aatgtcactg aaggcatggc agctgagctg aaatgtcggg cctccacatc 1950  
cctgacatct gtatcttggga ttactccaaa tggaacagtc atgacacatg 2000  
gggcgtacaa agtgcggata gctgtgctca gtgatggtac gttaaatttc 2050  
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P1618P2C3 sequence listing.txt

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 aggactgttg aaattattaa tgtggatgat gagattacgg gagacacacc 2550  
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<211> 640

<212> PRT

<213> Homo Sapien

<400> 292

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Leu	Ala	Leu	Gln	Leu	Leu	Val	Val	Ala	Gly	Leu	Val	Arg	Ala	Gln
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Thr	Cys	Pro	Ser	Val	Cys	Ser	Cys	Ser	Asn	Gln	Phe	Ser	Lys	Val
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Gln	Leu	Ser	Arg	Asn	His	Ile	Arg	Thr	Ile	Glu	Ile	Gly	Ala	Phe
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Asn	Gly	Leu	Ala	Asn	Leu	Asn	Thr	Leu	Glu	Leu	Phe	Asp	Asn	Arg
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Leu	Thr	Thr	Ile	Pro	Asn	Gly	Ala	Phe	Val	Tyr	Leu	Ser	Lys	Leu
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Lys	Glu	Leu	Trp	Leu	Arg	Asn	Asn	Pro	Ile	Glu	Ser	Ile	Pro	Ser

P1618P2C3 sequence listing.txt

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Glu Ile Pro Asn	Leu 215	Thr Pro Leu Ile	Lys 220	Leu Asp Glu Leu Asp 225
Leu Ser Gly Asn	His 230	Leu Ser Ala Ile	Arg 235	Pro Gly Ser Phe Gln 240
Gly Leu Met His	Leu 245	Gln Lys Leu Trp	Met 250	Ile Gln Ser Gln Ile 255
Gln Val Ile Glu	Arg 260	Asn Ala Phe Asp	Asn 265	Leu Gln Ser Leu Val 270
Glu Ile Asn Leu	Ala 275	His Asn Asn Leu	Thr 280	Leu Leu Pro His Asp 285
Leu Phe Thr Pro	Leu 290	His His Leu Glu	Arg 295	Ile His Leu His His 300
Asn Pro Trp Asn	Cys 305	Asn Cys Asp Ile	Leu 310	Trp Leu Ser Trp Trp 315
Ile Lys Asp Met	Ala 320	Pro Ser Asn Thr	Ala 325	Cys Cys Ala Arg Cys 330
Asn Thr Pro Pro	Asn 335	Leu Lys Gly Arg	Tyr 340	Ile Gly Glu Leu Asp 345
Gln Asn Tyr Phe	Thr 350	Cys Tyr Ala Pro	Val 355	Ile Val Glu Pro Pro 360
Ala Asp Leu Asn	Val 365	Thr Glu Gly Met	Ala 370	Ala Glu Leu Lys Cys 375
Arg Ala Ser Thr	Ser 380	Leu Thr Ser Val	Ser 385	Trp Ile Thr Pro Asn 390
Gly Thr Val Met	Thr 395	His Gly Ala Tyr	Lys 400	Val Arg Ile Ala Val 405
Leu Ser Asp Gly	Thr 410	Leu Asn Phe Thr	Asn 415	Val Thr Val Gln Asp 420
Thr Gly Met Tyr	Thr 425	Cys Met Val Ser	Asn 430	Ser Val Gly Asn Thr 435
Thr Ala Ser Ala	Thr 440	Leu Asn Val Thr	Ala 445	Ala Thr Thr Thr Pro 450
Phe Ser Tyr Phe	Ser 455	Thr Val Thr Val	Glu 460	Thr Met Glu Pro Ser 465
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<211> 4053
<212> DNA
<213> Homo Sapien
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P1618P2C3 sequence listing.txt

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ctcaaatatc tgtatctcaa cagcaaccga gtcacatcaa tggaacctgg 800  
gtattttgac aatttggcca acacactcct tgtgttaaag ctgaacagga 850  
accgaatctc agctatccca cccaagatgt ttaaactgcc ccaactgcaa 900  
catctcgaat tgaaccgaaa caagattaaa aatgtagatg gactgacatt 950  
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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

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 Pro Cys Pro Thr Thr Cys Arg Cys Leu Gly Asp Leu Leu Asp Cys  
 50 55 60  
 Ser Arg Lys Arg Leu Ala Arg Leu Pro Glu Pro Leu Pro Ser Trp  
 65 70 75  
 Val Ala Arg Leu Asp Leu Ser His Asn Arg Leu Ser Phe Ile Lys  
 80 85 90  
 Ala Ser Ser Met Ser His Leu Gln Ser Leu Arg Glu Val Lys Leu  
 95 100 105  
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 110 115 120  
 Ala Asn Ile Thr Leu Leu Ser Leu Ala Gly Asn Arg Ile Val Glu  
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 Ile Leu Pro Glu His Leu Lys Glu Phe Gln Ser Leu Glu Thr Leu  
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 200 205 210



P1618P2C3 sequence listing.txt

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Asp Gly Ala Phe	Trp 260	Gly Leu Ser Asn	Met 265	Glu Ile Leu Gln	Leu 270
Asp His Asn Asn	Leu 275	Thr Glu Ile Thr	Lys 280	Gly Trp Leu Tyr	Gly 285
Leu Leu Met Leu	Gln 290	Glu Leu His Leu	Ser 295	Gln Asn Ala Ile	Asn 300
Arg Ile Ser Pro	Asp 305	Ala Trp Glu Phe	Cys 310	Gln Lys Leu Ser	Glu 315
Leu Asp Leu Thr	Phe 320	Asn His Leu Ser	Arg 325	Leu Asp Asp Ser	Ser 330
Phe Leu Gly Leu	Ser 335	Leu Leu Asn Thr	Leu 340	His Ile Gly Asn	Asn 345
Arg Val Ser Tyr	Ile 350	Ala Asp Cys Ala	Phe 355	Arg Gly Leu Ser	Ser 360
Leu Lys Thr Leu	Asp 365	Leu Lys Asn Asn	Glu 370	Ile Ser Trp Thr	Ile 375
Glu Asp Met Asn	Gly 380	Ala Phe Ser Gly	Leu 385	Asp Lys Leu Arg	Arg 390
Leu Ile Leu Gln	Gly 395	Asn Arg Ile Arg	Ser 400	Ile Thr Lys Lys	Ala 405
Phe Thr Gly Leu	Asp 410	Ala Leu Glu His	Leu 415	Asp Leu Ser Asp	Asn 420
Ala Ile Met Ser	Leu 425	Gln Gly Asn Ala	Phe 430	Ser Gln Met Lys	Lys 435
Leu Gln Gln Leu	His 440	Leu Asn Thr Ser	Ser 445	Leu Leu Cys Asp	Cys 450
Gln Leu Lys Trp	Leu 455	Pro Gln Trp Val	Ala 460	Glu Asn Asn Phe	Gln 465
Ser Phe Val Asn	Ala 470	Ser Cys Ala His	Pro 475	Gln Leu Leu Lys	Gly 480
Arg Ser Ile Phe	Ala 485	Val Ser Pro Asp	Gly 490	Phe Val Cys Asp	Asp 495
Phe Pro Lys Pro	Gln 500	Ile Thr Val Gln	Pro 505	Glu Thr Gln Ser	Ala 510
Ile Lys Gly Ser	Asn 515	Leu Ser Phe Ile	Cys 520	Ser Ala Ala Ser	Ser 525

P1618P2C3 sequence listing.txt

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Gly	Gly	Glu	Val	Met	Glu	Tyr	Thr	Thr	Ile	Leu	Arg	Leu	Arg	Glu
				560					565					570
Val	Glu	Phe	Ala	Ser	Glu	Gly	Lys	Tyr	Gln	Cys	Val	Ile	Ser	Asn
				575					580					585
His	Phe	Gly	Ser	Ser	Tyr	Ser	Val	Lys	Ala	Lys	Leu	Thr	Val	Asn
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Met	Leu	Pro	Ser	Phe	Thr	Lys	Thr	Pro	Met	Asp	Leu	Thr	Ile	Arg
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Ala	Pro	Gln	Ile	Ala	Trp	Gln	Lys	Asp	Gly	Gly	Thr	Asp	Phe	Pro
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Ala	Ala	Arg	Glu	Arg	Arg	Met	His	Val	Met	Pro	Glu	Asp	Asp	Val
				650					655					660
Phe	Phe	Ile	Val	Asp	Val	Lys	Ile	Glu	Asp	Ile	Gly	Val	Tyr	Ser
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Cys	Thr	Ala	Gln	Asn	Ser	Ala	Gly	Ser	Ile	Ser	Ala	Asn	Ala	Thr
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Leu	Thr	Val	Leu	Glu	Thr	Pro	Ser	Phe	Leu	Arg	Pro	Leu	Leu	Asp
				695					700					705
Arg	Thr	Val	Thr	Lys	Gly	Glu	Thr	Ala	Val	Leu	Gln	Cys	Ile	Ala
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Gly	Gly	Ser	Pro	Pro	Pro	Lys	Leu	Asn	Trp	Thr	Lys	Asp	Asp	Ser
				725					730					735
Pro	Leu	Val	Val	Thr	Glu	Arg	His	Phe	Phe	Ala	Ala	Gly	Asn	Gln
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Leu	Leu	Ile	Ile	Val	Asp	Ser	Asp	Val	Ser	Asp	Ala	Gly	Lys	Tyr
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Thr	Cys	Glu	Met	Ser	Asn	Thr	Leu	Gly	Thr	Glu	Arg	Gly	Asn	Val
				770					775					780
Arg	Leu	Ser	Val	Ile	Pro	Thr	Pro	Thr	Cys	Asp	Ser	Pro	Gln	Met
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Thr	Ala	Pro	Ser	Leu	Asp	Asp	Asp	Gly	Trp	Ala	Thr	Val	Gly	Val
				800					805					810
Val	Ile	Ile	Ala	Val	Val	Cys	Cys	Val	Val	Gly	Thr	Ser	Leu	Val
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Trp	Val	Val	Ile	Ile	Tyr	His	Thr	Arg	Arg	Arg	Asn	Glu	Asp	Cys
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P1618P2C3 sequence listing.txt

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      875      880      885
Ser Gly Ala Gly Phe Phe Leu Pro Gln His Asp Ser Ser Gly Thr
      890      895      900
Cys His Ile Asp Asn Ser Ser Glu Ala Asp Val Glu Ala Ala Thr
      905      910      915
Asp Leu Phe Leu Cys Pro Phe Leu Gly Ser Thr Gly Pro Met Tyr
      920      925      930
Leu Lys Gly Asn Val Tyr Gly Ser Asp Pro Phe Glu Thr Tyr His
      935      940      945
Thr Gly Cys Ser Pro Asp Pro Arg Thr Val Leu Met Asp His Tyr
      950      955      960
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      980      985      990
Pro Ser His Val Arg Lys Leu Leu Asn Thr Ser Tyr Ser His Asn
      995      1000      1005
Glu Gly Pro Gly Met Lys Asn Leu Cys Leu Asn Lys Ser Ser Leu
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Asp Phe Ser Ala Asn Pro Glu Pro Ala Ser Val Ala Ser Ser Asn
      1025      1030      1035
Ser Phe Met Gly Thr Phe Gly Lys Ala Leu Arg Arg Pro His Leu
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Asp Ala Tyr Ser Ser Phe Gly Gln Pro Ser Asp Cys Gln Pro Arg
      1055      1060      1065
Ala Phe Tyr Leu Lys Ala His Ser Ser Pro Asp Leu Asp Ser Gly
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P1618P2C3 sequence listing.txt

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<210> 296

<211> 19

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<210> 297

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 297

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<210> 298

<211> 24

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<223> Synthetic Oligonucleotide Probe

<400> 298

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<210> 299

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 299

cattcccagt ataaaaattt tc 22

<210> 300

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 300

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<210> 301

<211> 24

P1618P2C3 sequence listing.txt

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<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 304  
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<210> 305  
<211> 45  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 305  
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<210> 306  
<211> 24  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 306  
actccaagga aatcggatcc gtgc 24

P1618P2C3 sequence listing.txt

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<210> 307
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 307
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<210> 308
<211> 24
<212> DNA
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<220>
<223> Synthetic Oligonucleotide Probe

<400> 308
   actccaagga aatcgatcc gtgc 24

<210> 309
<211> 50
<212> DNA
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<220>
<223> Synthetic Oligonucleotide Probe

<400> 309
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<210> 310
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<212> DNA
<213> Homo Sapien

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   cgagcccgcg gagcgcagct gagactgggg gagcgcgttc ggcctgtggg 100
   gcgccgctcg gcgccggggc gcagcaggga aggggaagct gtggtctgcc 150
   ctgctccacg aggcgccact ggtgtgaacc gggagagccc ctgggtgggc 200
   ccgtccccta tccctccttt atatagaaac cttccacact ggaaggcag 250
   cggcgaggca ggagggctca tggtagcaa ggaggccggc tgatctgcag 300
   gcgcacagca ttccgagttt acagattttt acagatacca aatggaaggc 350
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   atctgactcg gcaccccctg caggcaccat ggccagagc cgggtgctgc 450
   tgctcctgct gctgctgccg ccacagctgc acctgggacc tgtgcttgcc 500
   gtgagggccc caggatttgg ccgaagtggc ggccacagcc tgagccccga 550
   agagaacgaa tttgcggagg aggagccggt gctggtactg agccctgagg 600

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P1618P2C3 sequence listing.txt

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tgaaaaagat ctaccctgag gagctctccc ggctgcaccg gctggagaca 800  
ctgaacctgc aaaacaaccg cctgacttcc cgagggtccc cagagaaggc 850  
gtttgagcat ctgaccaacc tcaattacct gtacttggcc aataacaagc 900  
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tggctgtggg ctccgtggtg gacagtgcct tccggaggct gaagcacctg 2150

P1618P2C3 sequence listing.txt

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 gatggaccgc cggactcttt tctgcagcac acgcctgtgt gctgtgagcc 2350  
 cccactctg ccgtgctcac acagacacac ccagctgcac acatgaggca 2400  
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 gcgtgtccca cgccagaca catgcacaca catcacacc tcaaacaccc 2500  
 agctcagcca cacacaacta cctccaaac caccacagtc tctgtcacac 2550  
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<211> 22

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 311

gcattggccg cgagactttg cc 22

<210> 312

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<212> DNA

<213> Artificial sequence

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P1618P2C3 sequence listing.txt

<223> Synthetic Oligonucleotide Probe

<400> 312  
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<210> 313  
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<220>  
<223> Synthetic Oligonucleotide Probe

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<213> Homo sapien

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cgtacgtggg tcctacaagt gcaaatgtaa agaaggatac caggggtgatg 950  
gactgacttg tgtgtatatc caaaagtta tgattgaacc ttcaggtcca 1000  
attcatgtac caaagggaaa tgggtaccatt ttaaagggtg acacaggaaa 1050

P1618P2C3 sequence listing.txt

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taataattgg attcctgatg ttggaagtac ttggtggcct ccgaagacac 1100
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agacctacac caaagccaac accaattcct actccaccac caccaccacc 1200
cctgccaaca gagctcagaa cacctctacc acctacaacc ccagaaaggc 1250
caaccaccgg actgacaact atagcaccag ctgccagtac acctccagga 1300
gggattacag ttgacaacag ggtacagaca gacctcaga aaccagagg 1350
agatgtgttc agtgttctgg tacacagttg taattttgac catggacttt 1400
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acaccggcag acctttcctt cacctcatca gtatgattca gtttctctta 2600

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P1618P2C3 sequence listing.txt

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 gtagatccat ttttaatggt tcatttcctt tatggtcata taactgcaca 2800  
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 tgatacattg cactaaactg atggaagaag ttatccaaag tactgtataa 2900  
 catcttgttt attatttaat gttttctaaa ataaaaaatg ttagtggttt 2950  
 tccaaatggc ctaataaaaa caattatttg taaataaaaa cactgtagt 3000  
 aat 3003

<210> 315

<211> 509

<212> PRT

<213> Homo Sapien

<400> 315

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Gln	Ala	Ala	Ala	Glu	Phe	Asp	Gly	Arg	Trp	Pro	Arg	Gln	Ile	Val
				20					25					30
Ser	Ser	Ile	Gly	Leu	Cys	Arg	Tyr	Gly	Gly	Arg	Ile	Asp	Cys	Cys
				35					40					45
Trp	Gly	Trp	Ala	Arg	Gln	Ser	Trp	Gly	Gln	Cys	Gln	Pro	Val	Cys
				50					55					60
Gln	Pro	Arg	Cys	Lys	His	Gly	Glu	Cys	Ile	Gly	Pro	Asn	Lys	Cys
				65					70					75
Lys	Cys	His	Pro	Gly	Tyr	Ala	Gly	Lys	Thr	Cys	Asn	Gln	Asp	Leu
				80					85					90
Asn	Glu	Cys	Gly	Leu	Lys	Pro	Arg	Pro	Cys	Lys	His	Arg	Cys	Met
				95					100					105
Asn	Thr	Tyr	Gly	Ser	Tyr	Lys	Cys	Tyr	Cys	Leu	Asn	Gly	Tyr	Met
				110					115					120
Leu	Met	Pro	Asp	Gly	Ser	Cys	Ser	Ser	Ala	Leu	Thr	Cys	Ser	Met
				125					130					135
Ala	Asn	Cys	Gln	Tyr	Gly	Cys	Asp	Val	Val	Lys	Gly	Gln	Ile	Arg
				140					145					150
Cys	Gln	Cys	Pro	Ser	Pro	Gly	Leu	His	Leu	Ala	Pro	Asp	Gly	Arg
				155					160					165
Thr	Cys	Val	Asp	Val	Asp	Glu	Cys	Ala	Thr	Gly	Arg	Ala	Ser	Cys
				170					175					180
Pro	Arg	Phe	Arg	Gln	Cys	Val	Asn	Thr	Phe	Gly	Ser	Tyr	Ile	Cys
				185					190					195

P1618P2C3 sequence listing.txt

Lys Cys His Lys	Gly Phe Asp Leu Met	Tyr Ile Gly Gly Lys	Tyr
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Gln Cys His Asp	Ile Asp Glu Cys Ser	Leu Gly Gln Tyr Gln	Cys
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Ser Ser Phe Ala	Arg Cys Tyr Asn Val	Arg Gly Ser Tyr Lys	Cys
	230	235	240
Lys Cys Lys Glu	Gly Tyr Gln Gly Asp	Gly Leu Thr Cys Val	Tyr
	245	250	255
Ile Pro Lys Val	Met Ile Glu Pro Ser	Gly Pro Ile His Val	Pro
	260	265	270
Lys Gly Asn Gly	Thr Ile Leu Lys Gly	Asp Thr Gly Asn Asn	Asn
	275	280	285
Trp Ile Pro Asp	Val Gly Ser Thr Trp	Trp Pro Pro Lys Thr	Pro
	290	295	300
Tyr Ile Pro Pro	Ile Ile Thr Asn Arg	Pro Thr Ser Lys Pro	Thr
	305	310	315
Thr Arg Pro Thr	Pro Lys Pro Thr Pro	Ile Pro Thr Pro Pro	Pro
	320	325	330
Pro Pro Pro Leu	Pro Thr Glu Leu Arg	Thr Pro Leu Pro Pro	Thr
	335	340	345
Thr Pro Glu Arg	Pro Thr Thr Gly Leu	Thr Thr Ile Ala Pro	Ala
	350	355	360
Ala Ser Thr Pro	Pro Gly Gly Ile Thr	Val Asp Asn Arg Val	Gln
	365	370	375
Thr Asp Pro Gln	Lys Pro Arg Gly Asp	Val Phe Ser Val Leu	Val
	380	385	390
His Ser Cys Asn	Phe Asp His Gly Leu	Cys Gly Trp Ile Arg	Glu
	395	400	405
Lys Asp Asn Asp	Leu His Trp Glu Pro	Ile Arg Asp Pro Ala	Gly
	410	415	420
Gly Gln Tyr Leu	Thr Val Ser Ala Ala	Lys Ala Pro Gly Gly	Lys
	425	430	435
Ala Ala Arg Leu	Val Leu Pro Leu Gly	Arg Leu Met His Ser	Gly
	440	445	450
Asp Leu Cys Leu	Ser Phe Arg His Lys	Val Thr Gly Leu His	Ser
	455	460	465
Gly Thr Leu Gln	Val Phe Val Arg Lys	His Gly Ala His Gly	Ala
	470	475	480
Ala Leu Trp Gly	Arg Asn Gly Gly His	Gly Trp Arg Gln Thr	Gln
	485	490	495
Ile Thr Leu Arg	Gly Ala Asp Ile Lys	Ser Glu Ser Gln Arg	
	500	505	

P1618P2C3 sequence listing.txt

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<210> 316
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 316
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<210> 317
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 317
ttgcacttgt aggaccacg tacg 24

<210> 318
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 318
ctgatgggag gacctgtgta gatgttgatg aatgtgctac aggaagagcc 50

<210> 319
<211> 2110
<212> DNA
<213> Homo Sapien

<400> 319
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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

<211> 450

<212> PRT

<213> Homo Sapien

<400> 320

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          20          25          30

Gly Val Arg Gly Gln Ala Leu Tyr Leu Pro Val His Tyr Gly Phe
          35          40          45

His Thr Pro Ala Ser Asp Ile Gln Ile Ile Trp Leu Phe Glu Arg
          50          55          60

Pro His Thr Met Pro Lys Tyr Leu Leu Gly Ser Val Asn Lys Ser
          65          70          75

Val Val Pro Asp Leu Glu Tyr Gln His Lys Phe Thr Met Met Pro
          80          85          90

Pro Asn Ala Ser Leu Leu Ile Asn Pro Leu Gln Phe Pro Asp Glu
          95          100          105

Gly Asn Tyr Ile Val Lys Val Asn Ile Gln Gly Asn Gly Thr Leu
          110          115          120

Ser Ala Ser Gln Lys Ile Gln Val Thr Val Asp Asp Pro Val Thr
          125          130          135

Lys Pro Val Val Gln Ile His Pro Pro Ser Gly Ala Val Glu Tyr
          140          145          150

Val Gly Asn Met Thr Leu Thr Cys His Val Glu Gly Gly Thr Arg
          155          160          165

Leu Ala Tyr Gln Trp Leu Lys Asn Gly Arg Pro Val His Thr Ser
          170          175          180

Ser Thr Tyr Ser Phe Ser Pro Gln Asn Asn Thr Leu His Ile Ala
          185          190          195

Pro Val Thr Lys Glu Asp Ile Gly Asn Tyr Ser Cys Leu Val Arg
          200          205          210

Asn Pro Val Ser Glu Met Glu Ser Asp Ile Ile Met Pro Ile Ile
          215          220          225

Tyr Tyr Gly Pro Tyr Gly Leu Gln Val Asn Ser Asp Lys Gly Leu
          230          235          240

Lys Val Gly Glu Val Phe Thr Val Asp Leu Gly Glu Ala Ile Leu
          245          250          255

Phe Asp Cys Ser Ala Asp Ser His Pro Pro Asn Thr Tyr Ser Trp
          260          265          270

Ile Arg Arg Thr Asp Asn Thr Thr Tyr Ile Ile Lys His Gly Pro
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Arg Leu Glu Val Ala Ser Glu Lys Val Ala Gln Lys Thr Met Asp

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P1618P2C3 sequence listing.txt

290		295	300
Tyr Val Cys Cys	Ala Tyr Asn Asn Ile	Thr Gly Arg Gln Asp	Glu
305		310	315
Thr His Phe Thr	Val Ile Ile Thr Ser	Val Gly Leu Glu Lys	Leu
320		325	330
Ala Gln Lys Gly	Lys Ser Leu Ser Pro	Leu Ala Ser Ile Thr	Gly
335		340	345
Ile Ser Leu Phe	Leu Ile Ile Ser Met	Cys Leu Leu Phe Leu	Trp
350		355	360
Lys Lys Tyr Gln	Pro Tyr Lys Val Ile	Lys Gln Lys Leu Glu	Gly
365		370	375
Arg Pro Glu Thr	Glu Tyr Arg Lys Ala	Gln Thr Phe Ser Gly	His
380		385	390
Glu Asp Ala Leu	Asp Asp Phe Gly Ile	Tyr Glu Phe Val Ala	Phe
395		400	405
Pro Asp Val Ser	Gly Val Ser Arg Ile	Pro Ser Arg Ser Val	Pro
410		415	420
Ala Ser Asp Cys	Val Ser Gly Gln Asp	Leu His Ser Thr Val	Tyr
425		430	435
Glu Val Ile Gln	His Ile Pro Ala Gln	Gln Gln Asp His Pro	Glu
440		445	450

<210> 321

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 321

gacacctgtca caaagccagt ggtgc 25

<210> 322

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 322

cactgacagg gttcctcacc cagg 24

<210> 323

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 323



P1618P2C3 sequence listing.txt  
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<210> 324  
<211> 2397  
<212> DNA  
<213> Homo Sapien

<400> 324  
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cctgggtgctg ttgctttggg gtgctccctg gacgcacggg cggcggagca 100  
acgttcgcgt catcacggac gagaactgga gagaactgct ggaaggagac 150  
tggatgatag aattttatgc cccgtggtgc cctgcttgtc aaaatcttca 200  
accggaatgg gaaagttttg ctgaatgggg agaagatctt gaggttaata 250  
ttgcgaaagt agatgtcaca gacgagccag gactgagtgg acggtttatc 300  
ataactgctc ttcctactat ttatcattgt aaagatgggtg aatttaggcg 350  
ctatcagggg ccaaggacta agaaggactt cataaacttt ataagtata 400  
aagagtggaa gagtattgag cccgtttcat catggtttgg tccaggttct 450  
gttctgatga gtagtatgtc agcactcttt cagctatcta tgtggatcag 500  
gacgtgccat aactacttta ttgaagacct tggattgcca gtgtggggat 550  
catatactgt ttttgcttta gcaactctgt tttccggact gttattagga 600  
ctctgtatga tatttgtggc agattgcctt tgtccttcaa aaaggcgag 650  
accacagcca taccataacc cttcaaaaaa attattatca gaatctgcac 700  
aacctttgaa aaaagtggag gaggaacaag aggcggatga agaagatgtt 750  
tcagaagaag aagctgaaag taaagaagga acaaacaaag actttccaca 800  
gaatgccata agacaacgct ctctgggtcc atcattggcc acagataaat 850  
cctagttaaa ttttatagtt atcttaatat tatgattttg ataaaaacag 900  
aagattgatc attttgtttg gtttgaagtg aactgtgact tttttgaata 950  
ttgcagggtt cagtctagat tgtcattaaa ttgaagagtc tacattcaga 1000  
acataaaagc actaggtata caagtgtgaa atatgattta agcacagtat 1050  
gatggtttaa atagtctctt aatttttgaa aaatcgtgcc aagcaataag 1100  
atttatgtat atttgtttta taataacctt tttcaagtct gagttttgaa 1150  
aatttacatt tcccaagtat tgcattattg aggtatttaa gaagattatt 1200  
ttagagaaaa atatttctca tttgatataa tttttctctg tttcactgtg 1250  
tgaaaaaaag aagatatctc ccataaatgg gaagtttgcc cattgtctca 1300  
agaaatgtgt atttcagtga caatttcgtg gtcttttttag aggtatatct 1350  
caaaatttcc ttgtattttt aggttatgca actaataaaa actaccttac 1400

P1618P2C3 sequence listing.txt

attaattaat tacagttttc tacacatggg aatacaggat atgctactga 1450  
 ttttaggaagt ttttaagttc atgggtattct cttgattcca acaaagtttg 1500  
 attttctctt gtatttttct tacttactat gggttacatt ttttattttt 1550  
 caaattggat gataatttct tggaaacatt ttttatgttt tagtaaacag 1600  
 tatttttttg ttgtttcaaa ctgaagttaa ctgagagatc catcaaattg 1650  
 aacaatctgt tgtaatttaa aattttggcc acttttttca gattttacat 1700  
 cattcttgct gaacttcaac ttgaaattgt ttttttttcc tttttggatg 1750  
 tgaagggtgaa cattcctgat ttttgtctga tgtgaaaaag ccttggtatt 1800  
 ttacattttg aaaattcaaa gaagcttaat ataaaagttt gcattctact 1850  
 caggaaaaag catcttcttg tatatgtctt aaatgtattt ttgtcctcat 1900  
 atacagaaag ttcttaattg attttacagt ctgtaatgct tgatgtttta 1950  
 aaataataac atttttatat tttttaaaag acaaacttca tattatcctg 2000  
 tgttctttcc tgactggtaa tattgtgtgg gatttcacag gtaaaagtca 2050  
 gtaggatgga acatttttagt gtattttttac tccttaaaga gctagaatac 2100  
 atagttttca ccttaaaaga aggggggaaaa tcataaatac aatgaatcaa 2150  
 ctgaccatta cgtagtagac aatttctgta atgtcccctt ctttctaggc 2200  
 tctgttgctg tgtgaatcca ttagattttac agtatcgtaa tatacaagtt 2250  
 ttcttttaaag ccttctcctt tagaatttaa aatattgtac cattaaagag 2300  
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 aaacctttct aaccacttca ttaaagctga aaaaaaaaaa aaaaaaa 2397

<210> 325

<211> 280

<212> PRT

<213> Homo Sapien

<400> 325

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 20 25 30

Val Arg Val Ile Thr Asp Glu Asn Trp Arg Glu Leu Leu Glu Gly  
 35 40 45

Asp Trp Met Ile Glu Phe Tyr Ala Pro Trp Cys Pro Ala Cys Gln  
 50 55 60

Asn Leu Gln Pro Glu Trp Glu Ser Phe Ala Glu Trp Gly Glu Asp  
 65 70 75

Leu Glu Val Asn Ile Ala Lys Val Asp Val Thr Glu Gln Pro Gly

P1618P2C3 sequence listing.txt

80

85

90

Leu	Ser	Gly	Arg	Phe	Ile	Ile	Thr	Ala	Leu	Pro	Thr	Ile	Tyr	His
				95					100					105
Cys	Lys	Asp	Gly	Glu	Phe	Arg	Arg	Tyr	Gln	Gly	Pro	Arg	Thr	Lys
				110					115					120
Lys	Asp	Phe	Ile	Asn	Phe	Ile	Ser	Asp	Lys	Glu	Trp	Lys	Ser	Ile
				125					130					135
Glu	Pro	Val	Ser	Ser	Trp	Phe	Gly	Pro	Gly	Ser	Val	Leu	Met	Ser
				140					145					150
Ser	Met	Ser	Ala	Leu	Phe	Gln	Leu	Ser	Met	Trp	Ile	Arg	Thr	Cys
				155					160					165
His	Asn	Tyr	Phe	Ile	Glu	Asp	Leu	Gly	Leu	Pro	Val	Trp	Gly	Ser
				170					175					180
Tyr	Thr	Val	Phe	Ala	Leu	Ala	Thr	Leu	Phe	Ser	Gly	Leu	Leu	Leu
				185					190					195
Gly	Leu	Cys	Met	Ile	Phe	Val	Ala	Asp	Cys	Leu	Cys	Pro	Ser	Lys
				200					205					210
Arg	Arg	Arg	Pro	Gln	Pro	Tyr	Pro	Tyr	Pro	Ser	Lys	Lys	Leu	Leu
				215					220					225
Ser	Glu	Ser	Ala	Gln	Pro	Leu	Lys	Lys	Val	Glu	Glu	Glu	Gln	Glu
				230					235					240
Ala	Asp	Glu	Glu	Asp	Val	Ser	Glu	Glu	Glu	Ala	Glu	Ser	Lys	Glu
				245					250					255
Gly	Thr	Asn	Lys	Asp	Phe	Pro	Gln	Asn	Ala	Ile	Arg	Gln	Arg	Ser
				260					265					270
Leu	Gly	Pro	Ser	Leu	Ala	Thr	Asp	Lys	Ser					
				275					280					

<210> 326

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 326

tgaggtgggc aagcggcgaa atg 23

<210> 327

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 327

tatgtggatc aggacgtgcc 20

P1618P2C3 sequence listing.txt

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<210> 328
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 328
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<210> 329
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 329
    ttgaaggaca aaggcaatct gccac 25

<210> 330
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 330
    ggagtcttgc agttccccctg gcagtcctgg tgctgttgct ttggg 45

<210> 331
<211> 2168
<212> DNA
<213> Homo Sapien

<400> 331
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    aacgggaccc ttctgtgtgc cagaaaccgc aagcagttgc taaccagtg 100
    ggacaggcgg attggaagag cgggaaggct ctggcccaga gcagtgtgac 150
    acttccctct gtgaccatga aactctgggt gtctgcattg ctgatggcct 200
    ggtttggtgt cctgagctgt gtgcaggccg aattcttcac ctctattggg 250
    cacatgactg acctgattta tgcagagaaa gagctggtgc agtctctgaa 300
    agagtacatc cttgtggagg aagccaagct ttccaagatt aagagctggg 350
    ccaacaaaat ggaagccttg actagcaagt cagctgctga tgctgagggc 400
    tacctggctc accctgtgaa tgcctacaaa ctggtgaagc ggctaaacac 450
    agactggcct gcgctggagg acctgttcct gcaggactca gctgcaggtt 500
    ttatcgccaa cctctctgtg cagcggcagt tcttccccac tgatgaggac 550
    gagataggag ctgccaagac cctgatgaga cttcaggaca catacaggct 600

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P1618P2C3 sequence listing.txt

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gaaggggact attatcatat ggtgttggtg atggagcagg tgctaaagca 750
gcttgatgcc ggggaggagg ccaccacaac caagtcacag gtgctggact 800
acctcagcta tgctgtcttc cagttgggtg atctgcaccg tgccctggag 850
ctcaccgcc gcctgtcttc ccttgacca agccacgaac gagctggagg 900
gaatctgcgg tactttgagc agttattgga ggaagagaga gaaaaaacgt 950
taacaaatca gacagaagct gagctagcaa cccagaagg catctatgag 1000
aggcctgtgg actacctgcc tgagagggat gtttacgaga gcctctgtcg 1050
tggggagggt gtcaaaactga cccccgtag acagaagagg cttttctgta 1100
ggtaccacca tggcaacagg gccccacagc tgctcattgc ccccttcaaa 1150
gaggaggacg agtgggacag cccgcacatc gtcaggact acgatgtcat 1200
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ctgcagaatt gttacagggt gcaaattatg gagtgggagg acagtatgaa 1450
ccgcacttcg acttctctag gcgacctttt gacagcggcc tcaaacaga 1500
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gtggtgccac cgtcttcctt gatctggggg ctgcaatttg gcctaagaag 1600
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ccgaacaaga catgctgcct gccctgtgct tgtgggctgc aagtgggtct 1700
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tcaacagaag ttgactgaca tcctttctg tccttccct tcctggctct 1800
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ctatcaggct gatttttgga gaaatgaatg tttgtctgga gcagagggag 1900
accatactag ggcgactcct gtgtgactga agtcccagcc cttccattca 1950
gcctgtgcca tccctggccc caaggctagg atcaaagtgg ctgcagcaga 2000
gttagctgtc tagcgcctag caaggctcct ttgtacctca ggtgttttag 2050
gtgtgagatg tttcagtga ccaaagttct gataccttgt ttacatgttt 2100
gtttttatgg catttctatc tattgtggct ttaccaaaaa ataaaatgtc 2150
cctaccagaa aaaaaaaaa 2168

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P1618P2C3 sequence listing.txt

<210> 332  
 <211> 533  
 <212> PRT  
 <213> Homo Sapien

<400> 332

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Leu	Ser	Cys	Val	Gln	Ala	Glu	Phe	Phe	Thr	Ser	Ile	Gly	His	Met	20	25	30	
Thr	Asp	Leu	Ile	Tyr	Ala	Glu	Lys	Glu	Leu	Val	Gln	Ser	Leu	Lys	35	40	45	
Glu	Tyr	Ile	Leu	Val	Glu	Glu	Ala	Lys	Leu	Ser	Lys	Ile	Lys	Ser	50	55	60	
Trp	Ala	Asn	Lys	Met	Glu	Ala	Leu	Thr	Ser	Lys	Ser	Ala	Ala	Asp	65	70	75	
Ala	Glu	Gly	Tyr	Leu	Ala	His	Pro	Val	Asn	Ala	Tyr	Lys	Leu	Val	80	85	90	
Lys	Arg	Leu	Asn	Thr	Asp	Trp	Pro	Ala	Leu	Glu	Asp	Leu	Val	Leu	95	100	105	
Gln	Asp	Ser	Ala	Ala	Gly	Phe	Ile	Ala	Asn	Leu	Ser	Val	Gln	Arg	110	115	120	
Gln	Phe	Phe	Pro	Thr	Asp	Glu	Asp	Glu	Ile	Gly	Ala	Ala	Lys	Ala	125	130	135	
Leu	Met	Arg	Leu	Gln	Asp	Thr	Tyr	Arg	Leu	Asp	Pro	Gly	Thr	Ile	140	145	150	
Ser	Arg	Gly	Glu	Leu	Pro	Gly	Thr	Lys	Tyr	Gln	Ala	Met	Leu	Ser	155	160	165	
Val	Asp	Asp	Cys	Phe	Gly	Met	Gly	Arg	Ser	Ala	Tyr	Asn	Glu	Gly	170	175	180	
Asp	Tyr	Tyr	His	Thr	Val	Leu	Trp	Met	Glu	Gln	Val	Leu	Lys	Gln	185	190	195	
Leu	Asp	Ala	Gly	Glu	Glu	Ala	Thr	Thr	Thr	Lys	Ser	Gln	Val	Leu	200	205	210	
Asp	Tyr	Leu	Ser	Tyr	Ala	Val	Phe	Gln	Leu	Gly	Asp	Leu	His	Arg	215	220	225	
Ala	Leu	Glu	Leu	Thr	Arg	Arg	Leu	Leu	Ser	Leu	Asp	Pro	Ser	His	230	235	240	
Glu	Arg	Ala	Gly	Gly	Asn	Leu	Arg	Tyr	Phe	Glu	Gln	Leu	Leu	Glu	245	250	255	
Glu	Glu	Arg	Glu	Lys	Thr	Leu	Thr	Asn	Gln	Thr	Glu	Ala	Glu	Leu	260	265	270	
Ala	Thr	Pro	Glu	Gly	Ile	Tyr	Glu	Arg	Pro	Val	Asp	Tyr	Leu	Pro	275	280	285	

P1618P2C3 sequence listing.txt

Glu Arg Asp Val	Tyr 290	Glu Ser Leu Cys	Arg 295	Gly Glu Gly Val	Lys 300
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Gly Asn Arg Ala	Pro 320	Gln Leu Leu Ile	Ala 325	Pro Phe Lys Glu	Glu 330
Asp Glu Trp Asp	Ser 335	Pro His Ile Val	Arg 340	Tyr Tyr Asp Val	Met 345
Ser Asp Glu Glu	Ile 350	Glu Arg Ile Lys	Glu 355	Ile Ala Lys Pro	Lys 360
Leu Ala Arg Ala	Thr 365	Val Arg Asp Pro	Lys 370	Thr Gly Val Leu	Thr 375
Val Ala Ser Tyr	Arg 380	Val Ser Lys Ser	Ser 385	Trp Leu Glu Glu	Asp 390
Asp Asp Pro Val	Val 395	Ala Arg Val Asn	Arg 400	Arg Met Gln His	Ile 405
Thr Gly Leu Thr	Val 410	Lys Thr Ala Glu	Leu 415	Leu Gln Val Ala	Asn 420
Tyr Gly Val Gly	Gly 425	Gln Tyr Glu Pro	His 430	Phe Asp Phe Ser	Arg 435
Arg Pro Phe Asp	Ser 440	Gly Leu Lys Thr	Glu 445	Gly Asn Arg Leu	Ala 450
Thr Phe Leu Asn	Tyr 455	Met Ser Asp Val	Glu 460	Ala Gly Gly Ala	Thr 465
Val Phe Pro Asp	Leu 470	Gly Ala Ala Ile	Trp 475	Pro Lys Lys Gly	Thr 480
Ala Val Phe Trp	Tyr 485	Asn Leu Leu Arg	Ser 490	Gly Glu Gly Asp	Tyr 495
Arg Thr Arg His	Ala 500	Ala Cys Pro Val	Leu 505	Val Gly Cys Lys	Trp 510
Val Ser Asn Lys	Trp 515	Phe His Glu Arg	Gly 520	Gln Glu Phe Leu	Arg 525
Pro Cys Gly Ser	Thr 530	Glu Val Asp			

<210> 333

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 333

ccaggcaca tttccaga 18

P1618P2C3 sequence listing.txt

<210> 334  
 <211> 19  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 334  
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<210> 335  
 <211> 19  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 335  
 ggtctcaaga actcctgtc 19

<210> 336  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 336  
 acactcagca ttgcctggta ctg 24

<210> 337  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 337  
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<210> 338  
 <211> 2789  
 <212> DNA  
 <213> Homo Sapien

<400> 338  
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 ggtagttcc gacaccttca cagttgaaga gcaggcagaa ggagttgtga 150  
 agacaggaca atcttcttgg ggatgctggt cctggaagcc agcgggcctt 200  
 gctctgtctt tggcctcatt gaccccaggt tctctggtta aaactgaaag 250  
 cctactactg gcctggtgcc catcaatcca ttgatacttg aggctgtgcc 300  
 cctggggcac ccacctggca gggcctacca ccatgcgact gagctccctg 350



P1618P2C3 sequence listing.txt

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 tcgagagctc ggctagacca aagtgatgaa gacttcaaac cccggattgt 550  
 cccctactac agggacccca acaagcccta caagaagggtg ctcaggactc 600  
 ggtacatcca gacagagctg ggctcccgtg agcggttgct ggtggctgtc 650  
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 ccgggtggaa atcctaccta tgccctatgt cactgaggcc acccgagtgc 1800  
 agctgggtgct gccactcctg gtggctgaag ctgctgcagc cccggctttc 1850  
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P1618P2C3 sequence listing.txt

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 tcttccttac caccgtgtgg acaaggcctg ggcccgaagt cctcaaccgc 2150  
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<210> 339

<211> 772

<212> PRT

<213> Homo Sapien

<400> 339

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			20						25					30
Val	Ser	Trp	Ile	Gln	Gly	Glu	Gly	Glu	Asp	Pro	Cys	Val	Glu	Ala
			35						40					45
Val	Gly	Glu	Arg	Gly	Gly	Pro	Gln	Asn	Pro	Asp	Ser	Arg	Ala	Arg
			50						55					60
Leu	Asp	Gln	Ser	Asp	Glu	Asp	Phe	Lys	Pro	Arg	Ile	Val	Pro	Tyr
			65						70					75
Tyr	Arg	Asp	Pro	Asn	Lys	Pro	Tyr	Lys	Lys	Val	Leu	Arg	Thr	Arg
			80						85					90
Tyr	Ile	Gln	Thr	Glu	Leu	Gly	Ser	Arg	Glu	Arg	Leu	Leu	Val	Ala
			95						100					105

P1618P2C3 sequence listing.txt

Val	Leu	Thr	Ser	Arg	Ala	Thr	Leu	Ser	Thr	Leu	Ala	Val	Ala	Val	110	115	120
Asn	Arg	Thr	Val	Ala	His	His	Phe	Pro	Arg	Leu	Leu	Tyr	Phe	Thr	125	130	135
Gly	Gln	Arg	Gly	Ala	Arg	Ala	Pro	Ala	Gly	Met	Gln	Val	Val	Ser	140	145	150
His	Gly	Asp	Glu	Arg	Pro	Ala	Trp	Leu	Met	Ser	Glu	Thr	Leu	Arg	155	160	165
His	Leu	His	Thr	His	Phe	Gly	Ala	Asp	Tyr	Asp	Trp	Phe	Phe	Ile	170	175	180
Met	Gln	Asp	Asp	Thr	Tyr	Val	Gln	Ala	Pro	Arg	Leu	Ala	Ala	Leu	185	190	195
Ala	Gly	His	Leu	Ser	Ile	Asn	Gln	Asp	Leu	Tyr	Leu	Gly	Arg	Ala	200	205	210
Glu	Glu	Phe	Ile	Gly	Ala	Gly	Glu	Gln	Ala	Arg	Tyr	Cys	His	Gly	215	220	225
Gly	Phe	Gly	Tyr	Leu	Leu	Ser	Arg	Ser	Leu	Leu	Leu	Arg	Leu	Arg	230	235	240
Pro	His	Leu	Asp	Gly	Cys	Arg	Gly	Asp	Ile	Leu	Ser	Ala	Arg	Pro	245	250	255
Asp	Glu	Trp	Leu	Gly	Arg	Cys	Leu	Ile	Asp	Ser	Leu	Gly	Val	Gly	260	265	270
Cys	Val	Ser	Gln	His	Gln	Gly	Gln	Gln	Tyr	Arg	Ser	Phe	Glu	Leu	275	280	285
Ala	Lys	Asn	Arg	Asp	Pro	Glu	Lys	Glu	Gly	Ser	Ser	Ala	Phe	Leu	290	295	300
Ser	Ala	Phe	Ala	Val	His	Pro	Val	Ser	Glu	Gly	Thr	Leu	Met	Tyr	305	310	315
Arg	Leu	His	Lys	Arg	Phe	Ser	Ala	Leu	Glu	Leu	Glu	Arg	Ala	Tyr	320	325	330
Ser	Glu	Ile	Glu	Gln	Leu	Gln	Ala	Gln	Ile	Arg	Asn	Leu	Thr	Val	335	340	345
Leu	Thr	Pro	Glu	Gly	Glu	Ala	Gly	Leu	Ser	Trp	Pro	Val	Gly	Leu	350	355	360
Pro	Ala	Pro	Phe	Thr	Pro	His	Ser	Arg	Phe	Glu	Val	Leu	Gly	Trp	365	370	375
Asp	Tyr	Phe	Thr	Glu	Gln	His	Thr	Phe	Ser	Cys	Ala	Asp	Gly	Ala	380	385	390
Pro	Lys	Cys	Pro	Leu	Gln	Gly	Ala	Ser	Arg	Ala	Asp	Val	Gly	Asp	395	400	405
Ala	Leu	Glu	Thr	Ala	Leu	Glu	Gln	Leu	Asn	Arg	Arg	Tyr	Gln	Pro	410	415	420

P1618P2C3 sequence listing.txt

Arg	Leu	Arg	Phe	Gln	Lys	Gln	Arg	Leu	Leu	Asn	Gly	Tyr	Arg	Arg	425	430	435
Phe	Asp	Pro	Ala	Arg	Gly	Met	Glu	Tyr	Thr	Leu	Asp	Leu	Leu	Leu	440	445	450
Glu	Cys	Val	Thr	Gln	Arg	Gly	His	Arg	Arg	Ala	Leu	Ala	Arg	Arg	455	460	465
Val	Ser	Leu	Leu	Arg	Pro	Leu	Ser	Arg	Val	Glu	Ile	Leu	Pro	Met	470	475	480
Pro	Tyr	Val	Thr	Glu	Ala	Thr	Arg	Val	Gln	Leu	Val	Leu	Pro	Leu	485	490	495
Leu	Val	Ala	Glu	Ala	Ala	Ala	Ala	Pro	Ala	Phe	Leu	Glu	Ala	Phe	500	505	510
Ala	Ala	Asn	Val	Leu	Glu	Pro	Arg	Glu	His	Ala	Leu	Leu	Thr	Leu	515	520	525
Leu	Leu	Val	Tyr	Gly	Pro	Arg	Glu	Gly	Gly	Arg	Gly	Ala	Pro	Asp	530	535	540
Pro	Phe	Leu	Gly	Val	Lys	Ala	Ala	Ala	Ala	Glu	Leu	Glu	Arg	Arg	545	550	555
Tyr	Pro	Gly	Thr	Arg	Leu	Ala	Trp	Leu	Ala	Val	Arg	Ala	Glu	Ala	560	565	570
Pro	Ser	Gln	Val	Arg	Leu	Met	Asp	Val	Val	Ser	Lys	Lys	His	Pro	575	580	585
Val	Asp	Thr	Leu	Phe	Phe	Leu	Thr	Thr	Val	Trp	Thr	Arg	Pro	Gly	590	595	600
Pro	Glu	Val	Leu	Asn	Arg	Cys	Arg	Met	Asn	Ala	Ile	Ser	Gly	Trp	605	610	615
Gln	Ala	Phe	Phe	Pro	Val	His	Phe	Gln	Glu	Phe	Asn	Pro	Ala	Leu	620	625	630
Ser	Pro	Gln	Arg	Ser	Pro	Pro	Gly	Pro	Pro	Gly	Ala	Gly	Pro	Asp	635	640	645
Pro	Pro	Ser	Pro	Pro	Gly	Ala	Asp	Pro	Ser	Arg	Gly	Ala	Pro	Ile	650	655	660
Gly	Gly	Arg	Phe	Asp	Arg	Gln	Ala	Ser	Ala	Glu	Gly	Cys	Phe	Tyr	665	670	675
Asn	Ala	Asp	Tyr	Leu	Ala	Ala	Arg	Ala	Arg	Leu	Ala	Gly	Glu	Leu	680	685	690
Ala	Gly	Gln	Glu	Glu	Glu	Glu	Ala	Leu	Glu	Gly	Leu	Glu	Val	Met	695	700	705
Asp	Val	Phe	Leu	Arg	Phe	Ser	Gly	Leu	His	Leu	Phe	Arg	Ala	Val	710	715	720
Glu	Pro	Gly	Leu	Val	Gln	Lys	Phe	Ser	Leu	Arg	Asp	Cys	Ser	Pro	725	730	735

P1618P2C3 sequence listing.txt

Arg Leu Ser Glu Glu Leu Tyr His Arg Cys Arg Leu Ser Asn Leu  
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Glu Gly Leu Gly Gly Arg Ala Gln Leu Ala Met Ala Leu Phe Glu  
755 760 765  
Gln Glu Gln Ala Asn Ser Thr  
770

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<212> DNA  
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ctttttgaag ggtgtgatgc ttggaagcat tttctgtgct ttgatcacta 150  
tgctaggaca cattaggatt ggtcatggaa atagaatgca ccacatgag 200  
catcatcacc tacaagctcc taacaaagaa gatatcttga aaatttcaga 250  
ggatgagcgc atggagctca gtaagagctt tcgagtatac tgtattatcc 300  
ttgtaaaacc caaagatgtg agtctttggg ctgcagtaaa ggagacttgg 350  
accaaact gtgacaaagc agagtcttc agttctgaaa atgttaaagt 400  
gtttgagtca attaatatgg acacaaatga catgtgggta atgatgagaa 450  
aagcttaca atacgccttt gataagtata gagaccaata caactgggtc 500  
ttccttgac gccccactac gtttgctatc attgaaaacc taaagtattt 550  
tttgtaaaa aaggatccat cacagccttt ctatctaggc cacactataa 600  
aatctggaga ccttgaatat gtgggtatgg aaggaggaat tgtcttaagt 650  
gtagaatcaa tgaagagact taacagcctt ctcaatatcc cagaaaagtg 700  
tcctgaacag ggagggatga tttggaagat atctgaagat aaacagctag 750  
cagtttgctt gaaatatgct ggagtatttg cagaaaatgc agaagatgct 800  
gatggaaaag atgtatttaa taccaaactt gttgggcttt ctattaaaga 850  
ggcaatgact tatcacccca accaggtagt agaaggctgt tgttcagata 900  
tggctgttac ttttaatgga ctgactccaa atcagatgca tgtgatgatg 950  
tatgggggtat accgccttag ggcatttggg catattttca atgatgcatt 1000  
ggttttctta cctccaaatg gttctgacaa tgactgagaa gtggtagaaa 1050  
agcgtgaata tgatctttgt ataggacgtg tggtgtcatt attttagta 1100  
gtaactacat atccaataca gctgtatgtt tctttttctt ttctaatttg 1150  
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P1618P2C3 sequence listing.txt

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tttgctgatt ggtaaaaaa ttttaacagg tcttttagcgt tctaagatat 1400  
gcaaatgata tctctagttg tgaatttgtg attaaagtaa aacttttagc 1450  
tgtgtgttcc ctttacttct aatactgatt tatgtttctaa gcctcccaa 1500  
gttccaatgg atttgccttc tcaaaatga caactaagca actaaagaaa 1550  
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<210> 341

<211> 318

<212> PRT

<213> Homo Sapien

<400> 341

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Gly	His	Gly	Asn	Arg	Met	His	His	His	Glu	His	His	His	Leu	Gln	35	40	45	
Ala	Pro	Asn	Lys	Glu	Asp	Ile	Leu	Lys	Ile	Ser	Glu	Asp	Glu	Arg	50	55	60	
Met	Glu	Leu	Ser	Lys	Ser	Phe	Arg	Val	Tyr	Cys	Ile	Ile	Leu	Val	65	70	75	
Lys	Pro	Lys	Asp	Val	Ser	Leu	Trp	Ala	Ala	Val	Lys	Glu	Thr	Trp	80	85	90	
Thr	Lys	His	Cys	Asp	Lys	Ala	Glu	Phe	Phe	Ser	Ser	Glu	Asn	Val	95	100	105	
Lys	Val	Phe	Glu	Ser	Ile	Asn	Met	Asp	Thr	Asn	Asp	Met	Trp	Leu	110	115	120	
Met	Met	Arg	Lys	Ala	Tyr	Lys	Tyr	Ala	Phe	Asp	Lys	Tyr	Arg	Asp	125	130	135	
Gln	Tyr	Asn	Trp	Phe	Phe	Leu	Ala	Arg	Pro	Thr	Thr	Phe	Ala	Ile	140	145	150	
Ile	Glu	Asn	Leu	Lys	Tyr	Phe	Leu	Leu	Lys	Lys	Asp	Pro	Ser	Gln	155	160	165	
Pro	Phe	Tyr	Leu	Gly	His	Thr	Ile	Lys	Ser	Gly	Asp	Leu	Glu	Tyr	170	175	180	
Val	Gly	Met	Glu	Gly	Gly	Ile	Val	Leu	Ser	Val	Glu	Ser	Met	Lys	185	190	195	
Arg	Leu	Asn	Ser	Leu	Leu	Asn	Ile	Pro	Glu	Lys	Cys	Pro	Glu	Gln	200	205	210	

P1618P2C3 sequence listing.txt

Gly	Gly	Met	Ile	Trp	Lys	Ile	Ser	Glu	Asp	Lys	Gln	Leu	Ala	Val	215	220	225
Cys	Leu	Lys	Tyr	Ala	Gly	Val	Phe	Ala	Glu	Asn	Ala	Glu	Asp	Ala	230	235	240
Asp	Gly	Lys	Asp	Val	Phe	Asn	Thr	Lys	Ser	Val	Gly	Leu	Ser	Ile	245	250	255
Lys	Glu	Ala	Met	Thr	Tyr	His	Pro	Asn	Gln	Val	Val	Glu	Gly	Cys	260	265	270
Cys	Ser	Asp	Met	Ala	Val	Thr	Phe	Asn	Gly	Leu	Thr	Pro	Asn	Gln	275	280	285
Met	His	Val	Met	Met	Tyr	Gly	Val	Tyr	Arg	Leu	Arg	Ala	Phe	Gly	290	295	300
His	Ile	Phe	Asn	Asp	Ala	Leu	Val	Phe	Leu	Pro	Pro	Asn	Gly	Ser	305	310	315

Asp Asn Asp

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P1618P2C3 sequence listing.txt

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<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

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<210> 347

<211> 18

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<210> 348

<211> 48

<212> DNA

<213> Artificial Sequence

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<400> 348

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<211> 47

<212> DNA

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<210> 350

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<220>

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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

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<210> 365  
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<210> 366  
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<210> 367  
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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

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<210> 375
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<213> Artificial Sequence

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tgcttctctt cccaaatgtt cttatggact gttgctggga tccccatcct 200
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ttcaaacctg tgatgagaaa aagtttcagc tacctgagaa tttcacagag 300
ctctcctgct acaattatgg atcagggttca gtcaagaatt gttgtccatt 350
gaactgggaa tattttcaat ccagctgcta cttcttttct actgacacca 400
tttcctgggc gttaagttaa aagaactgct cagccatggg ggctcacctg 450
gtggttatca actcacagga ggagcaggaa ttcctttcct acaagaaacc 500
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tcaattattt tcggatttgt gaaatggtag gaataaatcc ttgaacaaa 750
ggaaaatctc ttaagaaca gaaggcaca ctcaaatgtg taaagaagga 800
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tgaacttcaa aggacttcat aagtatttgt tactctgata caaataaaaa 900

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P1618P2C3 sequence listing.txt  
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa 997

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<211> 219

<212> PRT

<213> Homo Sapien

<400> 377

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				20					25					30
Ile	Leu	Phe	Leu	Ser	Ala	Cys	Phe	Ile	Thr	Arg	Cys	Val	Val	Thr
				35					40					45
Phe	Arg	Ile	Phe	Gln	Thr	Cys	Asp	Glu	Lys	Lys	Phe	Gln	Leu	Pro
				50					55					60
Glu	Asn	Phe	Thr	Glu	Leu	Ser	Cys	Tyr	Asn	Tyr	Gly	Ser	Gly	Ser
				65					70					75
Val	Lys	Asn	Cys	Cys	Pro	Leu	Asn	Trp	Glu	Tyr	Phe	Gln	Ser	Ser
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Cys	Tyr	Phe	Phe	Ser	Thr	Asp	Thr	Ile	Ser	Trp	Ala	Leu	Ser	Leu
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Lys	Asn	Cys	Ser	Ala	Met	Gly	Ala	His	Leu	Val	Val	Ile	Asn	Ser
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Gln	Glu	Glu	Gln	Glu	Phe	Leu	Ser	Tyr	Lys	Lys	Pro	Lys	Met	Arg
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Glu	Phe	Phe	Ile	Gly	Leu	Ser	Asp	Gln	Val	Val	Glu	Gly	Gln	Trp
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Gln	Trp	Val	Asp	Gly	Thr	Pro	Leu	Thr	Lys	Ser	Leu	Ser	Phe	Trp
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Asp	Val	Gly	Glu	Pro	Asn	Asn	Ile	Ala	Thr	Leu	Glu	Asp	Cys	Ala
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Thr	Met	Arg	Asp	Ser	Ser	Asn	Pro	Arg	Gln	Asn	Trp	Asn	Asp	Val
				185					190					195
Thr	Cys	Phe	Leu	Asn	Tyr	Phe	Arg	Ile	Cys	Glu	Met	Val	Gly	Ile
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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

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<213> Homo Sapien

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gaagaaaatt caagatgaac aaaccacata tgtgtttttt gacaacaaa 300

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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

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P1618P2C3 sequence listing.txt

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Thr Tyr Val Phe Phe 80 Asp Asn Lys Ile Gln 85 Gly Asp Leu Ala Gly 90
Arg Ala Glu Ile Leu 95 Gly Lys Thr Ser Leu 100 Lys Ile Trp Asn Val 105
Thr Arg Arg Asp Ser 110 Ala Leu Tyr Arg Cys 115 Glu Val Val Ala Arg 120
Asn Asp Arg Lys Glu 125 Ile Asp Glu Ile Val 130 Ile Glu Leu Thr Val 135
Gln Val Lys Pro Val 140 Thr Pro Val Cys Arg 145 Val Pro Lys Ala Val 150
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His Pro Arg Pro His 170 Tyr Ser Trp Tyr Arg 175 Asn Asp Val Pro Leu 180
Pro Thr Asp Ser Arg 185 Ala Asn Pro Arg Phe 190 Arg Asn Ser Ser Phe 195
His Leu Asn Ser Glu 200 Thr Gly Thr Leu Val 205 Phe Thr Ala Val His 210
Lys Asp Asp Ser Gly 215 Gln Tyr Tyr Cys Ile 220 Ala Ser Asn Asp Ala 225
Gly Ser Ala Arg Cys 230 Glu Glu Gln Glu Met 235 Glu Val Tyr Asp Leu 240
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Tyr Phe Ile Asn Asn 275 Lys Gln Asp Gly Glu 280 Ser Tyr Lys Asn Pro 285
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305

P1618P2C3 sequence listing.txt  
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